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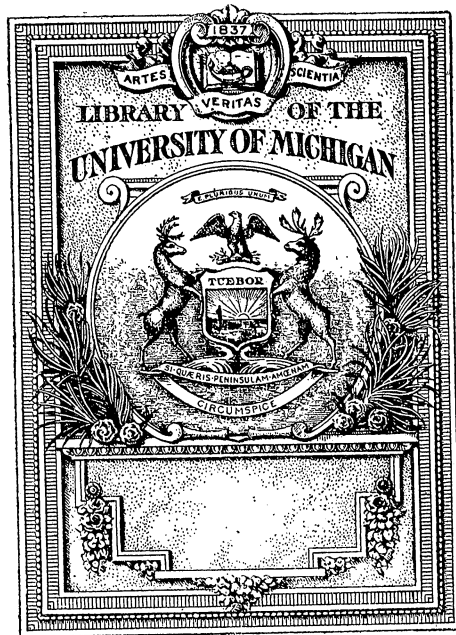
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TRANSACTIONS
OF THE
ROYAL ASIATIC SOCIETY
OF
GREAT BRITAIN AND IRELAND.

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TRANSACTIONS
OF THE
ROYAL ASIATIC SOCIETY.

- I. *Letters of Sir WILLIAM JONES to the late SAMUEL DAVIS, Esq., F.R.S., &c. from 1785 to 1794, chiefly relating to the Literature and Science of India, and elucidatory of the early History of the Asiatic Society of Calcutta. Communicated by JOHN FRANCIS DAVIS, Esq., F.R.S., M.R.A.S., &c.*

Read June 19, 1830.

 THE following Collection of Letters was presented to the Royal Asiatic Society by John Francis Davis, Esq., son of the distinguished individual to whom they are addressed, and were read at several of the General Meetings of the Society, where they excited so much interest and attention, that the Council conceived they would prove acceptable to the members of the Society in general, as well as the public at large; and accordingly directed their insertion in the present volume of the Transactions. The letters themselves were evidently not intended for publication; but that circumstance only tends to render them more interesting to the general reader, inasmuch as the picture they draw of the ardent mind, indefatigable industry, and kindness of heart, of the talented and amiable writer, must be regarded as the genuine offspring of his immediate feelings; while the man of letters, and the critic, will be equally delighted with the information they contain on the wide topic of Eastern science, and the acuteness and talent they display in weighing and duly estimating the various subjects submitted to his comprehensive mind. Nor will the anecdotes scattered throughout the letters, of the early history of the Asiatic Society of Calcutta, form their least attractive recommendation, to those readers who may still remember, with the fondness of early friendship, the individuals so honourably

VOL. III.

B

recorded, or who continue to feel a lively interest in the proceedings of the earliest and most successful of our literary institutions devoted to oriental subjects.

I.

Russa pugla
12 May 1785

Dear Sir,

I request your acceptance of a Hindu poem, the fruit, such as it is, of some leisure during this vacation. Paterson's Odes to the Raags have given me great pleasure, and I am frequently exhorting him to complete his ingenious plan. I am, hoping that you continue in perfect health,

Dear Sir

Your faithful and
obedient Servant
W. JONES.

II.

Jâferabâd
2 March 1786

Dear Sir,

I know not what apology to make for my tardiness in requesting your acceptance of the annexed compositions; but at Calcutta I had scarce time to breathe, much less to write, for the last three months. This country, where I hope to escape the heats, is delightful, and, in parts, mountainous, and sublime enough to be worthy of your pencil. The proper name of the district is *Châtigram*, and I cannot help deriving it from the *Châtig*, a bird which is said to haunt these woods, and is famed in the Indian poetry.

I am, dear Sir,

Your very obed^t humble
Serv^t W. JONES.

III.

Crishna nagar

21 Sept. 1786.

Dear Sir,

I had the pleasure of receiving your very interesting and acceptable letter on my return to Calcutta, but have been prevented by a variety of business from taking up a pen till I had settled myself for the remainder of the vacation in this charming retirement.

Need I say what pleasure it would give me to visit Múti Jerna, which you have so graphically described? But I have been lately such a rambler, I hope not an idler, that I must be stationary at Calcutta for a twelve-month at least. I will not, however, abandon the hope of seeing *Bhágálpur* in its improved state, of admiring the bluish hills that terminate the vista, and tasting the fruit of its vines. In the mean time, I must insert a stanza on your waterfall in my Ode to the Ganges: at least if you draw the romantic scene, as I trust you have already drawn it, I will translate your picture into my feebler colouring. I shall soon send you an Ode to the Sun *à l'Indienne*; and if I should not be able to send a letter with it, you will know from whom it came. I really find poetry a relief to my mind after its severer employment in the discharge of my public duty.

A tree entirely charred in the fissure of a rock is certainly a curiosity, nor do I remember to have seen an account of such a phenomenon; but I should rather impute it to some phosphorick or pyrophorick substance (such as nitrous acid and phlogiston, or perhaps vitriolick acid mixed with a mineral), which took fire as soon as the air was admitted by the perforation of the rock, and formed a real charcoal of the oil and earth of the vegetable. I beg you will give my best remembrance to Mr. Adair: I have just written to my worthy friend his father. I am, dear Sir,

Your very faithful

& obed^t. Serv^t

W. JONES.

IV.

Calcutta: 10 Nov. 1788.

Dear Sir,

I beg your acceptance of an Ode to the Goddess of Abundance, and will trouble you to give the other copy to Mr. Saunders, with my best compliments.

B 2

The first volume of our Transactions will soon, I trust, be published; and the second volume will, I hope, be enriched with your papers on Hindu Astronomy. On the 145th page of the first volume begins a paper by Mr. Chambers, on the Ruins at *Mavalipuram*, near *Sadras*; and the author, I recollect, informed me that you had a sketch of those ruins: now, if Mr. Daniell be with you, and would have the goodness to make an etching of your drawing, it might be printed here by Brittridge, and would greatly illustrate Mr. Chambers' paper, as well as embellish the book. Mr. Daniell knows the size of our volume. Give my best compliments to him, to Mr. Adair, and all our common friends; and believe me, dear Sir,

Your faithful humble serv^t

W. JONES.

V.

Calcutta: 8 Dec. 1788

Dear Sir,

I cannot delay thanking you, as I do most heartily, for your kind letter; but I must write very succinctly, as I have scarce a moment at this season, which I can call my own. Your researches into the Hindu astronomy are indeed highly interesting, and some papers of yours will, I trust, give value to the second volume of our Transactions, to which your sketch of Mavalipuram will, I hope, be prefixed. The first volume will be published next month; and though it will want the decoration of your drawing, will, I am sure, be found curious and useful.

My best compl^{ts} to my friends at Bhagalpur, and believe me

Dear Sir

Your faithful humble

serv^t W. JONES.

VI.

Gardens near Calcutta:

28 Febr. 1789.

Though I am not a practical astronomer, yet your valuable dissertation, my dear Sir, has given me great delight. I heartily rejoice that you have directed your studies to so important a subject; and agree with you in every point, except in thinking that your paper is too prolix to be printed, as it stands, in the second volume of the Transactions: in the first volume

(which, I hope, you have received) are several papers full as prolix and less interesting. I will readily correct the press; but as my eyes are weak, and my time always occupied, I must have assistance in correcting the figures and tables: the proof-sheets must be compared figure by figure with the manuscript, since the minutest error might be material. Some of our members would, I trust, assist me with their eyes and attention. The second volume will soon go to the press, all the materials being ready; and I will, if you please, keep the paper till I receive farther directions from you. Sir R. Chambers shall see it, as you desire; unless he prefer hearing me read it at a meeting of the Society. It gives me great pleasure, that you mean to write the Sanscrit words according to the component *letters*; for, as there are many provincial modes of *pronouncing* them (four of which I have been obliged to learn) we have no sure guide, but the letters themselves: thus पक्ष is pronounced here *pokyo*, in Behàr *puch'h*; you write it *puck*; but the word itself is *pacsha* (for क + ष = क्ष), and so it is pronounced in the west of *India*. I will, if you please, take care of the orthography when I correct the proofs; but, as I cannot from your spelling make out some words (as *jaw*, which I suppose to be ज्यौ *jyā*) I wish your Pandit would send me a list in *Nāgari* letters, of all the Sanscrit proper names and terms of science which occur in the Dissertation. The whole is wonderfully curious; and, though you intended at first to give only a computation of the Lunar Eclipse, yet, in its enlarged state it should have, I think, a more general title, as *On the Astronomical Computations of the Hindus*, or some such phrase. If you direct me to send it back before it goes to the press, I will assuredly obey; but I shall be loth to expose a tract of which you have no other copy, to the hazard of being lost by the post. Lady Jones presents you and all our friends at Bhāgalpur (for so I write the true name भागलपुर) with her kindest remembrance; and I beg you will give mine to Mr. Adair, and Mr. and Mrs. Saunders. By the way, tell Mr. Saunders that he will greatly oblige me by letting me know, whether he saw in Butan, or has seen any where else, the fresh plant and flowers of the *Jatāmāsi* جتامةسي, or true Indian spikenard, which is said by Ptolemy to abound in the north and north-east of these provinces: if he has seen it, I shall be very glad to know what are its order and genus in the Linnæan system. I am with great regard, my dear Sir,

Your faithful &

obed^t Serv^t

W. JONES.

VII.

'Aárif-nagar :

5 April 1789

Dear Sir

Mr. Harington has taken your dissertation to have it copied, and when the copy is finished I will send it to you, that you may give it the last stroke of your accurate pen. Your observations on the work of *Brahmagupta*, compared with the *Súrya Siddhánta*, are curious and important. I wish to know on what authority you assert that BHÁSCAR ACHÁRYA wrote 1710 years ago: the Persian translator of his *Líldwatì* says, "This book has no date; but the *Carnacutríhal*, or *Delight of Ears*, another work of "BHÁSCARA, is dated in the 1105th year from king SACA, or SÁLIVÁHAN;" if that be true, the *Indian* philosopher must have flourished about 606 years ago, since we are now in the 1711th year of *Saca*. When you read the *Siddhánta Siromaní* (mentioned in your Pandit's useful list of names and terms of science), you will meet with some very curious passages concerning the ancient Geography of India.

The second volume of the Transactions is in the press, and by way of frontispiece to it, we shall all be much obliged to you for your sketch of the ruins at *Mavalipuram*, which Mr. Daniell will etch, when he returns from his excursion up the country. I am greatly obliged to Mr. Saunders for his information concerning the *Jatdmási* or spikenard: pray ask him (with my best compl^s) whether the curled locks of it, which the druggists sell dry, are the roots of the *Baccharis*, or only bundles of fibres shooting from the bottom of the stem. The Europeans, I find, who never saw the fresh plant, are divided in opinion as to this question. Linnæus makes the spikenard an *Andropogon*; and I am glad to be set right by such an authority as that of Mr. Saunders. We will summon the Society to read your paper, as soon as it has been correctly copied.

I am, dear Sir,

Your faithful and

obed^t Serv^t

W. JONES.

VIII.

Gardens near Fort William :

17 April 1789.

I am commissioned, my dear Sir, by our Society, to give you their hearty thanks for your very interesting dissertation, which I had the pleasure of reading last night at a full meeting. I had read it twice before ; and the oftener I read it, the more I am pleased with it. A copy of it has been taken, but it would require more time than I can spare to correct the mistakes of the transcriber : I keep it therefore here, and send you the original, requesting you to return it by the post when you have revised it to your satisfaction, and I will then send it to the press, and correct the proof-sheets myself with great attention. We are advancing pretty fast in the second volume of our Transactions, of which your paper will be a principal ornament. I mean to print the index of *Sanscrit* astronomical terms at the end of your paper, with an explanation of them. I shall therefore be much obliged to you, if you will desire your *Pandit* to write in *Dévandgarī* the words which he has omitted in his first list, and which I have scribbled in the last page of your paper. I am very glad that you adopt the method of writing *Sanscrit* words according to the *letters*, which are *constant*, instead of the *pronunciation*, which is always *variable* : the Cashmirian Pandits, indeed, *pronounce* all the *letters* as I write them ; so that my method has every advantage. Thus *urgun* is pronounced in Cashmir *ahargana*, and so it is written अहर्गण, literally, *day-number*.

Sir R^t Chambers said last night that he had a commentary on the *Varasamhitā*, which, as he heard at *Banāres*, is an incomparable work, and which he would lend you if he could convey it to you with safety. As to the figures in your paper, I dare say Mr. Daniell will be so kind as to etch them for us under your direction, when he returns towards Calcutta through *Bhāgalpur*. I am, dear Sir,

Your ever faithful &
affect^e serv^t

W. JONES.

Be so good as to let me know whether you receive this packet, as I shall be anxious for its safety.

IX.

^Aárif-nagar : 4 May 1789.

My dear Sir,

Having set myself a long task for my summer vacation, I will answer your two agreeable letters with all possible conciseness. I anxiously hope that the work of BHÁSCARA may prove a treatise on universal arithmetic : the rule, which you translate from it, goes no farther than *signs* placed over *numbers* : but, as a point is a symbol of *sound*, when it stands over a letter, it would be rather an inconvenient negative sign, if the Hindus have a *specious* or universal notation. I have met, in the *Lettres Edifiantes*, a curious passage on Indian science, which you will soon be able to disprove or to confirm : “ The *Hindu* logicians,” says Father *Du Pons*, “ admit four “ principles of knowledge; 1. *prátyacsha* or intuition. 2. infallible or “ divine authority. 3. *anumána*, which means syllogism or enthymema. “ 4. *upamána*, or *equation*, which is the application of a definite *known* “ quantity to the definition of another quantity *till then* unknown.” Now a clearer description of algebra than this could hardly be given; and if there be treatises on specious arithmetic in *Sanscrit*, we shall possibly find rules and methods, which may be substantially useful. The list of astronomical books is in my study at Calcutta; and I will not fail to send it to you. Mr. Chambers is, I know, desirous that the sketch of *Mavalipuram* should appear in our second volume, with a reference to his paper in the first; and I hope Mr. Daniell will return in time to etch both that drawing, and the figures which will be necessary to illustrate your own valuable paper. I now come to your second letter. The Sanscrit stanza is literally this :

“ Fruitless *are* other Shástràs : in them *is* contention only :

“ Fruitful *is* the Jyótish Shástra ; where the sun *and* moon *are* two witnesses.”

or, more literally still in Latin :

“ Inutiles aliæ scientiæ : lis in istis tantum :

“ Utilis astronomia; in quâ Sol Luna testes duo.”

Your translation of it, therefore, is accurate ; and I only took the liberty of altering it, because the fastidiousness of my ear made me think one of the rhymes imperfect. Your spirited paraphrase of the stanza I have read more than once with great pleasure. And now, my dear Sir, permit me to

conclude (though I could write to you for hours without being tired) with assuring you, that I am with great regard

Your faithful and affect^e

Serv^t W. JONES.

Lady J. begs to be kindly remembered to you, and joins with me in hearty good wishes to all our friends at Bhágalpur.

X.

Gardens: 12 July 1789.

My dear Sir,

I was in hope of being able to send you my complete list of Sanscrit books on Astronomy, but have mislaid it; you shall have it however soon, as it must be among my papers. I will not trouble you with a long letter, and only snatch a moment of leisure to inform you, that 200 pages of our Transactions are printed, and that I wish to print your valuable paper soon, that it may be corrected in the press with the most scrupulous attention. Mr. Burrow or myself, or both of us, will revise the proofs; and when you have made the alterations which you proposed (though to me it seemed perfect, and none but yourself would have thought it needed alteration), you will be so good as to send it to me. L^y Jones (who is recovering from her affliction on the death of her father) desires her best remembrance, and I am, dear Sir, your faithful and affect^e

W. JONES.

XI.

Calcutta: 16 Aug. -89.

My dear Sir,

We set out for our hermitage on the 22d, and hope to stay there two months: in that interval I shall resign the Transactions to Harington, to whom you will have the goodness to send your excellent Dissertation, if you have leisure to make the alterations which you proposed. Neither Burrow nor I can find the long list of astronomical books; but I enclose a general list, with the names of 45 or 46 books on astronomy: when your Pandit has copied it, you may devote it to the Ganges, as I have another

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copy. I scribbled on it some years ago, when I scarce knew the Nagari letters. I am obliged to conclude, and am, dear Sir,

Your ever faithful

Serv^t W. JONES.

XII.

Calcutta, 8 Nov. 1789.

I had the pleasure this morning, my dear Sir, of revising the first sheet of your very interesting Dissertation, and my pleasure will increase as I go on with the revision: it is the 15th paper of the second volume, which, I hope, will be finished this season. I will take care of the press-work, punctuation, and orthography; but when we come to the calculations, I must desire Harington or Morris, or both, to assist my weak eyes with their good eyes; for, if a single figure be misplaced, a great difference will be made, and the compositors in this country are shamefully inaccurate. If you catch Daniell at Bhágalpur, you will not forget the ruins of Mavalipuram, which, if etched by him from your drawing, will be a handsome frontispiece to our second volume, with a reference to Mr. Chambers's paper in the first. You will remember, also, the etching of your astronomical figure to illustrate your paper now in the press, which cannot be done here so well as under your own eyes. Since the appointment of Mr. Seton, you will have, I trust, more leisure for your important inquiries into Indian astronomy. M. Bailly has lately published a fifth volume of his history of that science, and entitles it *L'Astronomie Indienne et Orientale*. I received it by the last ship, but shall not be able to look at it till next September or October. I lent my copy to R^d Johnson, and, after him, Jon. Duncan is to have it: he will have an opportunity, at any time, of sending it to you; but, if you wish to read it sooner, Mr. Chapman desires me to tell you, that he will send you his copy. Burrow is sick, and cannot at present assist us with his eyes or his mind. I have written four papers for the Society, one of which, *On the Hindu Zodiac*, was read last Thursday: the others are on Music and Botany; but I shall be condemned for ten months to dry law. Adieu, my dear Sir, and believe me

Your ever faithful

obed^t Serv^t

W. JONES.

XIII.

^A/rif-nagar : 21 Febr. 1790.

My dear Sir,

Yesterday afternoon I sent Mr. Morris and Mr. Tucker the last proof of your paper on Indian Astronomy, and the whole will be completely printed and struck off in a few days. Want of leisure and weak eyes obliged me to resign to them the correction of the press, reserving only to myself the punctuation and the spelling of Sanscrit words. Mr. Morris will send you a perfect copy, and if you will have the goodness to make a list of errata, I will insert it in the general table at the end of the volume. There must be copper-plates of the figures: if Mr. Daniell could have etched them under your eye, it would have been better; but should he be detained up the country, either *Alefounder* or *Brittridge* shall etch or engrave them, when they can or will; but Brittridge is extremely dilatory, and has not yet finished your drawing of the medals found on the coast. I anticipate your triumph over M. Bailly, whose late work, I presume, you have read. His materials are full of errors to my knowledge, and you have, I doubt not, discovered many which escaped me. I beg leave to enclose a list of the 27 *yóga* stars in the order of the lunar mansions: the words are written in the form of the *crude nouns*, not in the nominative case, as *A'yushmá* for *A'yushmán*, &c. If you have leisure to send me a table of their longitudes, latitudes, and right ascensions according to the Hindus, it will be very useful to me. Excuse the dryness and brevity of this letter; but I have much on my hands, and no time to perform it, except what I snatch at intervals, when I have no public business; and those intervals are rare. I am, dear Sir, with great regard, your ever faithful Serv^t

W. JONES.

XIV.

Pray how is *Dheber deda* written in *Sanscrit*?

Arifnagar 21 March 1790.

I am infinitely obliged to you, my dear Sir, for your kind letter, for the table of the *yóga* stars, and for a very elegant drawing of the Indian ecliptic, which I will study when I am released from business, whenever that may be. The passage in the *Varáhasanhitá* is not only curious, but of the

greatest importance in settling the antiquity of the Indian laws and literature; for *Parásera*, the Muni cited in it, wrote a *Dhermasanhita*, which I have, and his son *Vyása* was contemporary with *Crishna*. I rely implicitly on your calculation, that the equinox had gone back about $3^{\circ} 40'$ between that Muni and the Argonauts, which would place *Parásera* 1201 years before *Christ*. But what shall we say of *Garga*, whose stanza also is quoted, and who, to my knowledge, is mentioned in the *Véda* itself? And after this, what becomes of the vaunted Indian antiquity? I am so young in astronomy (having only read the first book of Newton's Principia, and gone through the ordinary course of the Elements, Conick Sections, and Fluxions) that you must not be surprized at my errors; but I cannot, with Harris's chart before me, understand how the *tenth* degree of *Bharani* could only be $3^{\circ} 40'$ eastward of the equinoctial colure in the time of the Argonauts, which colure (*Newt. Chron.* p. 89) did in the end of 1689, cut the ecliptic in $8^{\circ} 6' 29' 15''$. Now, if α *Arietis*, with ten degrees of north latitude, be the *yóga* star of *Aswini* in the eighth degree of longitude, according to the table, the first degree of *Mésa*, and consequently the first degree of *Aswini* must appear in the chart about $\approx 25^{\circ}$, from which the $13^{\circ} 20'$ of *Aswini* and the 10 degrees of *Bharani* would carry us to $8^{\circ} 18' 20'$. But I am probably carried by haste and ignorance far beyond my sphere, and, as I said before, I rely implicitly on your calculation. How I wish you had leisure to translate the *Súrya Siddhánta* verbally, and to seal your triumph over M. Bailly, who supposes that no *European* will ever decypher that book? I am translating the divine MENU, the most sacred book next to the VEDA: to *Menu* and the new Digest I allot all my leisure; but I am resolved to devote a whole morning in the next vacation to the *yóga* stars, all of which I hope to find in Harris's chart; but I am puzzled at the outset for want of knowing exactly the first degree of *Mésa*, and the *yóga* star of *Révatì*, for, on a transient view, I see only ζ *Piscium*, which can be said to have no latitude, and even that is in Harris a little to the south of the ecliptic. I also wish you had leisure to write a short paper for our second volume, explaining your drawing of the Hindu ecliptic (which I would have engraved), and comparing it with the present state of the heavens and with the primitive sphere. But in the present state of your district, I fear you have no leisure. Say from me to *Radhácheren* आद्युष्मान्भवसौम्य. I would answer his Sanscrit letter, if I were

not oppressed with business. L^y Jones presents you with her best compl^{ts}
and I am with great esteem, dear Sir,

Your ever faithful

W. JONES.

XV.

Gardens near Calcutta,

4 April 1790

My dear Sir,

Allow me to intrude on your present important engagements with a second letter on the Extract from the *Vardhasanhita*, with which you lately favoured me: the passage is of the utmost consequence to me, as it will fix the age of the Hindu laws. I am very sorry that your copy of the book is so incorrect: I can assure you, that not a line in it was free from error. By knowing the metre, however, I have restored the whole to the entire satisfaction of the Pandit who attends me; and I annex a copy of the six stanzas, on which the rest of the paper is a comment. The stanzas seem introduced as a quotation, but the author of them being called *A'charya*, I suppose the whole *Varahasanhita* is written in the metre, called *A'rya*: I have a fine tract on Music in the same measure. The stanza consists of four cesural pauses, of which the first and third contain 12 syllabic moments (*matras*), the second 18, and the fourth 15; so that the couplet resembles the long and short verses of the Greeks and Romans. Pray ask *Radhacheren*, whether the whole *Sanhita* is in verse, or whether the six stanzas in question are quoted from a book entitled *Panchasiddhantica*. The comment on them has three quotations; one in verse, from *Garga*; and two in prose from *Parasara*, both very curious. Now the question, which you alone can answer, is, how many years have elapsed between the time, when the equinoctial colure cut the *Hindu* ecliptic in the *tenth* of *Bharani*, and the first of January 1790. I shall be infinitely obliged to you if you will answer it, and without attending to the observation ascribed to Chiron, which a passage in Pindar makes me think of very doubtful authority. If the first degree of *Mesha* were coincident with the first degree of *Aries* in the European sphere, the question would be easy; because we know, by demonstration and observation, that the equinox goes back about 50' 0'' 12^{iv} in a year, and 50' will answer our purpose, as *Parasara's*

observation was probably *coarse*, as Newton says of *Chiron's*: but the difficulty to me is to fix precisely the last degree of *Révati*, or the first of *Aswini*, in the *Hindu* sphere. Could I depend on the *Sástras*, which unanimously place the *yóga* star of *Aswini* in the 8th deg. of longitude, and the 10th of northern latitude, I should pronounce that star to be α *Arietis*, the longitude of which in our sphere was, I believe, on 1st Jan. 1790, $\approx 4^{\circ} 43' 20''$, whence the origin of the *Hindu* Zodiac would be $\approx 26^{\circ} 43' 20''$ —but where then shall we find the *yóga* star of *Révati*, to which all the tables give no latitude, and most of them no longitude? It cannot be ζ *Piscium*, which is more than 17 degrees from α *Arietis*. In short, I am so puzzled by this same *yóga* star of *Révati*, that I could not travel with comfort round the Zodiac with your table in my hand, and Harris's chart before me. I wish I were at Bhágalpur to take that celestial journey with you; but I must, after this day, abandon the stars, and attend for a month longer to squabbles in court about gold mohrs and star—pagodas.

I am, dear Sir,

Your ever faithful

& affect^e Serv^t

W. JONES.

The following Note by Mr. Davis is appended to the preceding Letter.

The beginning of *Aswini* must be distant in longitude from the *present* place of the vernal equinox $19^{\circ} 21'$ nearly. I say *nearly*, because there seems to be an error in the *aynansa* of almost a degree. The sun enters Aries by our account (which I suppose to be correct) near a day later than his arrival at the equinox by the Hindu computation; and this disagreement should be considered in determining the beginning of *Aswini* on Harris's chart. Of the few *yóga* stars I have had leasure to compare with our Tables, that of *Chitra* corresponds the nearest: it should be found in long. $(180^{\circ} + 19^{\circ} 21' =) 199^{\circ} 21'$ and lat. 2° S., and in the Britannic Catalogue, Spica has long. $\approx 19^{\circ} 31' 21''$ or $199^{\circ} 31' 21''$, and lat. $2^{\circ} 1' 59''$ S. I am assured by my Pandit that *Cretica's yóga* is one of the Pleiades, the brightest of which has in the Britannic Catalogue, long. $\approx 25^{\circ} 40' 8''$, lat. $4^{\circ} 0' 37''$ N.: here there is a greater difference, for the long. of *Cretica's yóga* is $(37^{\circ} 30' + 19^{\circ} 21' =) \approx 26^{\circ} 51'$, and its lat. 5° N., α *Arietis* cannot be the *yóga* of *Bharani*, because its long. in our Catalogue is $33^{\circ} 19' 18''$,

from which deduct $19^{\circ} 21'$ for its longitude in the Hindu sphere = $13^{\circ} 58' 18''$, whereas the longitude of *Bharani's yôga* is 8° .

I place the *Argonautic* colure in the Hindu ecliptic on the following grounds:—admitting that colure in 1689 or 1690 to have cut the ecliptic in $6^{\circ} 29' 15''$, its place must now be $36^{\circ} 29' 15'' + 1^{\circ} 23' 20'' = 37^{\circ} 52' 35''$ from the beginning of Aries, from which subtract the *Aynansa* $19^{\circ} 21'$, the remainder $18^{\circ} 31' 35''$ is the longitude of the *Argonautic* colure in the Hindu ecliptic, which falls in *Bharani* $5^{\circ} 11' 35''$, and is $4^{\circ} 48' 25''$ distant from the 10th degree of *Bharani*.

If I have laid it down nearer it is an error.

XVI.

Gardens 11 April 1790

My dear Sir,

Another holiday has enabled me to solve (unless I am deceived) the problem with which I troubled you, and which highly interests me in my inquiry concerning *Indian* jurisprudence.

Vardhacharya lived, as all agree, in the *Caliyug*; but, by his own account, the place of the vernal equinox in his time was the 1st of *Mésa*: he lived therefore at the end of the libratory period, or in the 3600th year of the *Caliyug*; that is, 1290 years before A.D. 1789, or A.D. 499; and from the *ayanansa* of the *Hindus*, at $54''$ a year, or $19^{\circ} 21'$, we find 1290 years to have elapsed, though in truth the precession in that period, at $50''$ a year, was but $17^{\circ} 55'$ at the beginning of 1789. But the equinox had gone back $23^{\circ} 20'$ between *Parásar* and *Vardha*, which precession at $50''$ a year, gives us 1680 years: so that *Parásar* flourished 1181 years before *Christ* = $1680 + 1290 = 2970$ from A.D. 1789.

I know you to be so busy that I will not trouble you with more: I only request that you will critically examine my reasoning, and, if it be erroneous, correct it. When Mr. Grant is arrived, and you have more leisure, you will have more trouble from

Dear Sir,

Your faithful
& affectionate

W. JONES.

* Precession in 100 years.

XVII.

Calcutta: 19 April 1790

My dear Sir,

That I may not miss to-night's post, I write from the bench, in the middle of a very difficult cause, a short answer to your acceptable and interesting letter of the 16th. Brittridge has long been employed, or pretending to be employed, in engraving your drawing of the Roman coins found at Nelore, and one or two other drawings; but I kept your astronomical figures, that they might be finished (if possible) under your own eye. For fear of accident I do not annex them; but if you have no copy I will send them on the first intimation. They are absolutely necessary for the illustration of your important paper: the ruins of Mavalipuram would make an elegant frontispiece, with a reference to Chambers's paper in Vol. I.; but such a decoration is not essentially necessary. Your Hindu ecliptic would also greatly illustrate your paper; but if our friend Mr. Daniell (to whom my best compl^{ts} and thanks) had leisure to undertake it, you might rely on my care here in superintending the plate. Alefounder is etching Sanscrit for me, but he is a tyro in that branch of art. You have irradiated my mind on the subject of the Hindu Zodiac: no doubt by the reckoning of the Hindus the 1st degree of *Mésa* should be $19^{\circ} 21'$ nearly from the vernal eq^x. On a hasty computation from the Spike or *chitra* $6^{\circ} 40'$ I should make it $19^{\circ} 31' 21''$, but a precession of $19^{\circ} 21'$ would give us 1290 years, in which period the precession, at $50''$ annually, would be, $17^{\circ} 55' 0''$. Perhaps M. *le Gentil* is right in saying that the Hindus compute from two points of their Ecliptic, one of which is γ of the Ram. In no other way can I bring within compass the stars which appear delineated, though rudely, in the Indian drawing engraved by Shepherd. Adieu, my dear Sir. I must attend to a witness, and leave you for a time. At all times I shall ever be

Yours faithfully

W. JONES.

XVIII.

Calcutta: 27 Oct. 1790

The packet of the Foulis, my dear Sir, is just arrived, and I have not read half my letters; but as one of them (from Mr. Shore) encloses a

tract on Hindu Astronomy, I send it off instantly to you. Mr. Shore desires me to send it Mr. Burrow; but I think you more worthy than any man of its *pucelage*. When you have done with it you will return it; but keep it as long as you please. I have also a gracious message from the King, to whom I desired, that a copy of the Transactions might be delivered. *Nared* is ready for you: his book contains 56 leaves. Shall I send it by the post? Adieu! you perceive I am in great haste. Remember the *errata* and the *plates*, and believe me dear Sir

Your faithful and affect°

W. JONES.

XIX.

Calcutta 21 Nov. 1790.

My dear Sir,

Though it is late in the day, yet that I may not lose to-night's post I scribble a few lines to thank you for your letter of the 13th and to send *Nared*. Your plates we shall eagerly expect, the whole work being finished: you do not mention the *errata* for your paper, which are, I hope, with the plates. L^y Jones desires me to say, that she will not *yet* trouble you with commissions for the hills, but that if I could pack her up with *Nared*, she should be happy to enjoy in this season the comforts of your *fire-side*. Adieu, and assure yourself that I am, dear Sir,

Your ever faithful

and affect°

W. JONES.

XX.

Calcutta: 6 Jan^y 1791.

My dear Sir,

The corrections are all printed, and the book was to be published to-day, if a number of copies could be stitched in time. Our third volume will go to the press immediately; and will, I hope, be embellished by your dissertations. Duncan has finished an essay, which I expect every day; and Wilford promises much on Indian Geography. Something, I hope, may be collected from *Nared*; but I am told by a well-informed Brahmen, that *Va-*

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râha and his commentator display a treasure of learning in astronomy, geography, and science in general. It is from you alone (not from Bailly or Playfair) that we must expect accurate information on those subjects; but I am very anxious, that (if you do not already read Sanscrit with ease) you will learn enough of it to be in great measure independent of the Pandits: half an hour a day spent in reading the Sanscrit grammar would carry you far enough for that purpose in two or three months. I say this, because I have the first part of a short and easy grammar, which I will beg you to accept if you chuse it; and will send it, if you give the word. I have received the inscriptions at Mavalipuram, mentioned by Mr. Chambers, with four curious drawings; your sketch of the ruins will therefore be a great ornament to our third volume. Farewel, my dear Sir: to-morrow begins our term, and I have no hope of an hour's leisure for the next four months. Remember me kindly to Mr. Daniell and Mr. Glas.

I am, with great regard

L^y Jones is pretty
well, and sends her
best remembrance.

Your faithful serv^t

W. JONES.

XXI.

Gardens: 30 Jan. 1791.

My dear Sir,

We have been sitting nine hours a day for a whole week on a trial, which will last a week longer, and I am so fatigued this morning with copying my eighth anniversary discourse, that I can only thank you shortly, though heartily, for your letter. I send the *Sâreswatâ* (which you will oblige me by accepting) in two parts; the chapter on participles is wanting; but those on nouns and verbs are complete. Do not mind the Brahmens, who affect to despise this grammar, because it is easy: it is so, but it is perspicuous and elegant, and will fully answer your purpose. I would not advise you to get the rules by heart, but merely to read the book with your Pandit. L^y Jones sends her best compl^s and, as some of her sick friends have asked for honey, she will be much obliged to you if you will send a bottle or two, when the season of honey comes, and when a boat is coming to Calcutta.

I am, dear Sir,

Ever affect^{ly} yours,

W. JONES.

XXII.

Crishna-nagar :

16 Sept. 1791.

My dear Sir,

I have the pleasure to send you a little tract, which I have just received, and which may perhaps afford you some amusement: After a most severe campaign in the wordy war of our court, I am reposing myself in my cottage, and paying, as fast as I can, my annual tribute of letters to Europe. By this time I imagine you have finished your *Súrya Siddhánta*, and completed your triumph over Le Gentil and Bailly: the third volume of the *Researches* is far advanced, 150 pages being printed, and 5 or 6 plates etched. I should like to see it embellished by a dissertation from your accurate pen *On the Indian Ecliptick*, to illustrate the drawing with which you favoured me last year. Wilford has sent us a chart of the Nile and the countries near it, from the *Scanda-purán*, in which he thinks he has found (and I hope he is not deceived) a treasure of ancient geography. L^y Jones presents you with her best compliments, and we both beg to be kindly remembered to Mr. Glas and to Mr. Daniell, if he be still with you. I am, my dear Sir,

Your ever faithful

Serv^t W. JONES.

XXIII.

Crishna-nagar :

11 Oct. 1791.

My dear Sir,

Marsden's paper is wholly at your service, and it is the promised accompaniment only that will make me wish to see it again. No doubt your Indian Ecliptick may be etched at Calcutta, and shall be; but as the drawing is too large for the quarto page, it must be contracted a little; and a smaller drawing, with an explanation of it, will greatly embellish our third volume. Of Wilford's discoveries I must suspend my opinion till I see his proofs: I hope he is advancing in Sanscrit. I have an elaborate Hindu chart of the Universe, and was struck with the four rivers of Paradise. Do they mean the colures? or is it all fancy? By translating the *Súrya Siddhánta* from the original with the assistance of Brahmens, you will have a great advantage over Le Gentil, and all other writers on Indian astronomy: I long to see the work separately printed in a handsome quarto volume.

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Nine books of Menu's Laws are ready for the press : they are wonderfully curious. L^d. Jones thanks you heartily for the honey : we shall be in town towards the end of the month. I am, dear Sir,

Your ever faithful
and obed^t. W. JONES.

XXIV.

Arifnagar : 27 Dec. 1791.

My dear Sir,

I hasten to answer your acceptable letter. No doubt there is an inaccuracy (which I beg you will find an opportunity of correcting) in my use of the word *solstice* : I felt it at the time, but wished to avoid the foreign word *ayana*, to which we must I believe have recourse ; as I do not think *road* or *path* will do, unless we say it *began*, instead of it *was*. *Solstice* implies *motum in loco*, and *ayana* (literally *going*) seems to imply *motum à loco ad locum* ; while *road* or *path* imply *continuity of motion*. I thought the phrase *dacshināyana*, literally *motus ad meridiem*, might be translated, *according to the Indian expression*, more concisely by *southern solstice*, than by *the beginning of the sun's motion or road to the south* ; for had I said *northern solstice*, it would have looked as if *dacshina* meant *northern* ; and so, *mutatis mutandis*, of the *uttarāyana*, or *ad septentrionem itio*. I would propose (and I thought of saying this in a note, but had not time) to write either the sun's southern *ayana*, &c. or *the beginning of the sun's southern path* ; and so of the northern. On the whole, the puzzle is purely grammatical ; and I was led to it by a desire of translating as verbally as possible, but with all possible brevity. I cannot understand the account of *Saca*, and have no work by *Calidas* on astrology ; but *Agastya* puzzles me more than any thing, one Pandit insisting it is *Sirius*, and another *Canopus* : pray desire your Pandit to point at *Agastya* some clear evening : I have reasons for wishing to know him, having seen a curious quotation from his *Samhita*. I shall long for your paper on the Cycle, and hope you will find leisure to add another in illustration of your Hindu Ecliptick, especially if your Pandit can point out the zodiacal stars in the firmament. I shall never find them in Harris's Chart for 1690, when, by Flamstead's observation, the first of *Aswini* should have been γ $19^{\circ} 31' 22''$, which I cannot reconcile with the *Hindu ayana* for

that year. Lady Jones presents you and Mr. Glas (to whom my best remembrance) with the compl^{ts} of this season ; and I am, dear Sir,

Your ever faithful

W. JONES.

XXV.

Gardens near Calcutta :

12 Febr. 1792.

My dear Sir,

I am desired by the Society, to whom I read your interesting paper last Thursday, to give you their hearty thanks, and I beg you will accept mine in particular ; for, independently of my pleasure, as a lover of truth, to see errors corrected, I am so much of an Englishman, that I cannot bear the thought of our being surpassed by the French in any thing : and you will have the honour of being the first European who drew a knowledge of Indian Astronomy from the fountain-head. I have almost blinded myself this morning with botany ; and can only add (with Lady Jones's best compliments) that I am, dear Sir,

The drawing shall be
neatly engraved, and
the letter-press carefully
corrected.

Your faithful and

obed^t Serv^t

W. JONES.

XXVI.

Gardens near Calcutta :

9 May 1792.

My dear Sir,

No man but yourself deserves an Indian astrolabe, and our friend Chapman will send it you by his servant : it was found at Agra, and I beg you will accept it. I believe it very modern, as I think it has two corrupt Arabick words on it.

Your interesting paper on the Cycle of Sixty is printed, and, I hope, correctly, as I had the aid of better eyes than my own : Morris will send it to you ; and I beg you will have the goodness to set down the errata.

Wilford has procured a very precious book in Sanscrit on the Hindu

Sphere, with drawings of the constellations *out* of the ecliptick : he has sent me Cassiopeia, Cepheus, Andromeda, Perseus, Pegasus, Equleus, Orion, Sirius, with the old Sanscrit names and descriptive *ślokas*, mentioning all the *yogas*. I have requested Duncan to have the book copied : it would enable you to draw a complete Hindu planisphere. I have finished the Institutes of Hindu Law, and am so busy in copying them, that I can only add (with Lady Jones's best compl^{ts}) that I am, dear Sir,

ever truly your's

W. JONES.

XXVII.

Calcutta 12 June 1792.

My dear Sir,

I thank you sincerely for your account of the Astrolabe ; and am persuaded that your idea of its age and use is perfectly just : if Chaucer's treatise be in town, you shall have it as soon as possible. My summer campaign is begun and allows me no time for literature, which I shall resume in the autumn. At present I must conclude with thanking you for the finest grapes I ever saw, and with assuring you, that I am, dear Sir,

Your ever faithful

& affect. Serv^t

S. Davis, Esq.

W. JONES.

XXVIII.

Crishna-nagar 7 Oct. 1792.

My dear Sir,

Though I shall be anxious till I know that you have received this packet safe, yet I cannot postpone the pleasure of sending it to you, because I know it will give *you* pleasure : it is, I think, the greatest curiosity I have seen in India ; for the asterisms differ too much from those of Greece to be borrowed (even if the Brahmens had not been too proud to borrow) yet are like enough to shew a common origin. The third volume of our Transactions is nearly finished ; and I ardently hope you will embellish the *fourth* volume with a dissertation from your accurate pen On the Ancient Sphere of the Hindus ; if you will draw an outline of the Indian

constellations on separate pages to illustrate your paper I will have them all engraved, and you will have the honour of a triumph over Le Gentil, Bailly, and all the oriental Astronomers of France. The story of Cepheus, Cassiopeia, Andromeda, and Perseus, is in the *Purdns*: that of *Subdhaca* &c. I have read. I am so busy with my Digest of Law, that I could only run hastily over the papers, which I annex, and may have made more mistakes than I have detected. Mistakes there certainly are in the manuscript. It is singular that Spica should be placed in $\simeq 19^\circ$. Does not this look as if the Sanscrit verses were modern? I long to know what you and your Pandit say to the whole. The fourth volume of the Transactions will be the last I shall see printed, while I stay in India. Lady Jones will embark for Europe next February: this time twelvemonth I shall set out on a pilgrimage to *Mat'hurá*, and hope to see you in my way; and, in March 1795 (if I live) I shall embark for Madras, whence I shall go to China, and, returning to Bombay, shall travel, through part of Persia and Arabia, to Constantinople, Greece, and Italy, where Lady Jones intends to meet me. She presents you with her best remembrance, and I am, dear Sir,

Your faithful and affect^d

Serv^t W. JONES.

XXIX.

Off Champal Gaut, Calcutta.

20 Oct. 1792.

We are just arrived, my dear Sir, at the town of *Cali*, or *contention*, (which is the proper name, and a *very proper* one, of Calcutta); here I had the pleasure of finding your acceptable letter; and though we are in the midst of confusion, yet I will not delay acknowledging the receipt of it, as I cannot tell when I shall again be able to hold a pen for so agreeable a purpose. Should Wilford be able, before he goes to *Nepal*, to send me the *whole* astrological book, from which he extracted the chapter in your possession, I will take the first good opportunity of transmitting it to you: I have nothing to add on that chapter, except that *Mucura* means a *mirror*, and not a *lamp*, as I guessed. Will you allow me to suggest an idea as to your globe and drawings? D'Anville, in a manner very pleasing to me, and in a book which I always read with delight, has exhibited a correct map of India according to the best modern observations, but with

all the Greek and Roman names as far as he had been able to ascertain them. Would it not therefore be better to exhibit the asterisms *according to the true places* of the stars, but with the old Hindu figures of the constellations and the Sanscrit names? There can be no relying on the Indian draughtsman: but you will find, in the Sanscrit verses, a short account of the parts of each constellation, in which there are distinguished stars, besides the *yóga*. I have requested Wilford to send me all the legends concerning the Hindu asterisms and their *yógas*; and I expect to find much curious matter in them. By the way, his Essay on *Egypt* and the *Nile* from the *Puráns*, &c. will appear at full length with this curious map, in the 3^d Vol. of our Transactions, which will be published, I hope, next January; but I hope you will find some other motive for visiting Calcutta before next autumn, when I shall see you, I trust, in my way to *Mat'hura*. Lady Jones thanks you heartily for your kind wishes, and would be most happy if she could accompany me next year to *Bhagalpur*; but I am really apprehensive, that another hot season in Bengal would weaken her delicate constitution irrecoverably. India agrees with me so well, that if it were not for her sake, I would not leave it even in 1795; but I cannot persuade myself that a dissolution of our Asiatick Society will be the consequence of my departure, while you are constantly making discoveries in astronomy, Wilford in geography, and others in different branches of natural history. In the rural retirement, which I meditate on my return to England, I shall always be able to contribute something; and perhaps more effectually than here, because better engravers may be found in London than in Calcutta: I hope, in short, to see the 4th volume printed before I leave India, and the 14th at least, before I leave this world.

I am, dear Sir,

Your ever faithful
and obed^t Serv^t

W. JONES.

XXX.

Gardens near Calcutta.

My dear Sir,

24 Dec. 1792.

Having but this instant discovered that a printed copy of your valuable paper has not been sent to you, I enclose it in great haste, requesting you

to return it, when you have written the *errata* in the margin. There will not be time this season to print any large *additions* to it, as the whole volume of 500 pages is ready for publication: your Hindu Ecliptick is engraved, but I have no impression of it here, or would annex it. I had the pleasure of sending by Mr. Glass a Hindu drawing of the Ecliptick, &c. Wilford's paper fills 168 pages; he and you are the pillars of our Society. Farewell, my dear Sir, and continue to esteem me

Your ever faithful
W. JONES.

XXXI.

Gardens 14 May [1793?]

My dear Sir,

Lest you should hear of my illness, and we should lose the pleasure of your company, I write a few lines to say, that my tooth-ach was caused by a slight fever, which was so good as to leave me this morning, and Dr. Hare has prescribed the bark: I am therefore well enough to enjoy your conversation, and hope, as the weather is now fine, that you will take a family dinner with us any day you please: we dine at three, but shall be happy in seeing you earlier.

L^y Jones unites with me in hoping for the pleasure of your company; and we beg you will present our kindest remembrance to our friends Mr. and Mrs. Chapman. I am, dear Sir,

Ever truly yours
W. JONES.

XXXII.

Bandell 14 Sept. 1793.

My dear Sir,

I am recovering slowly from a rheumatick fever, and cannot write without pain. The annexed paper (which you need not trouble yourself to return) I have just received and hastily read: it shows how curious they are in England on every subject relating to Indian Astronomy. We have abundance of materials for our fourth volume; but I hope it will be embellished by some paper of yours. An account of the *Yantra-rāja*, or

VOL. III.

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Hindu Astrolabe, would be interesting. I hope soon to send you drawings of *all* the Indian Constellations; to the number, says Wilford, of 150.

Lady Jones presents you with her best compliments and I am, dear Sir,

Your faithful
& affect^e Serv^t.
W. JONES.

XXXIII.

Bandeli 19 Oct. 1793

My dear Sir,

As I am every day obliged to press my weak eyes almost beyond their strength, and as you promise us the pleasure of seeing you some time in November, I will only trouble you at present with a little botanical commission. One of the most famous Indian trees is named *Tamála* तमालः; but, in all this province, there is only a single Tamála-tree, growing at *Gwálabhúm*, or *Gwálapúr* (I think the former pronounced *Gwawla boom*), about two days' journey from the town of *Burdwan*: now, if this rare tree should lie in your way to the south, and if it should be in blossom, I shall thank you heartily for some of the flowers; if not, for some of its leaves on a small branch; the leaves are said to be almost black, and rather fragrant: all the Pandit Bráhmens know it. A model of the observatory at Benares will, no doubt, be a great ornament to the room where the Society meet, or to any room on earth. I forget whether I asked your opinion on the question: "Are the Hindu astronomers able to make a retrospective calculation of the places of the heavenly bodies at the beginning of the Caliyug, *with that extreme accuracy* which is ascribed to their tables?"—but these matters we will talk over, when we meet.

Lady Jones will embark in the Princess Amelia, and I hope to follow her in two years at farthest: she presents you with her best remembrance; and I am, dear Sir,

Your ever faithful
W. JONES.

XXXIV.

7 Febr. 1794

My dear Sir,

You gave us hopes, when you left us, of seeing you soon at Calcutta; and, if you should be here on the 20th of this month, I shall be happy in

your company at dinner with the Asiatick Society, whose anniversary meeting is fixed for that day. Whenever you come, have the goodness to remember the *flowers* of the *Tamála*, and to bring with you the Hindu constellations, which I sent you from *Crishn-nagar*, as I have received another Sanscrit work with 84 drawings, &c. by which I shall be able to correct the errors in the former. I am too busy to add more than that I am, my dear Sir, yours ever truly

W. JONES.

XXXV.

15 Febr.

My dear Sir,

Your letter and its accompaniments (the most precious of which is your own MS.) arrive at sunset, when I can hardly see what I write. Tomorrow I will examine your book with great attention: I have rec^d all the Constellations from Benares, in number 104, including some single stars; but, as I find among them not only Antinous but even the twelve asterisms of Americus Vespucius, it is clear that part of the Sanscrit is very modern, and was drawn up probably by order of *Jayasinh*, from some European planisphere. I will propose your health on Thursday in a bumper of Shiraz: when you come to Calcutta, pray bring the *Tamála* flowers; but yourself will be the most welcome object to, my dear Sir,

Your ever faithful

W. JONES.

In the Sanscrit book which I have received from Wilford's Bráhmén, the longitude of Spica is $\simeq 19^\circ$, which looks as if a copy of Harris's Chart had been shown by missionaries or other Europeans to very modern Pandits.

XXXVI.

Calcutta 1 March 1794

I have had leisure, my dear Sir, during a very short vacation to peruse your book on the Indian constellations, and I perused it with great delight. Your drawings are excellent, and shall be well engraved, if you can find

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leisure to add those which are *certainly* ancient and of Hindu origin. To save you trouble, I will translate word for word all the Sanscrit verses, and write the translation in a separate book, which I will deliver to you together with the original. Do you know when the Jayasinha, or Jysingh, lived, who patronized science and ordered the Brahmans to compile books on Mathematicks and Astronomy? I am told, not above sixty years ago; if so, he probably had European globes or planispheres; and I suspect, that the works procured by Wilford were compiled by his order. You will be surprized to see the Great Bear (as complete a bear as that which attacked you at Pandua*) with a *very short tail* and with the seven *Rishis* and little *Arundhati* on his back. The single stars, with the names of gods and sages, as Agastya, Garga, Prajapati, Indradyumna and his wife, &c. are, I conceive, to be found in the oldest Hindu books: then follow the asterisms, concerning which there are legends in the *Brahmánda Purán* and others: but most of the southern constellations must have been named in very modern times. That the haughty Brahmans should have borrowed any of our names and configurations is a very curious fact, and may incline us to doubt their unwillingness in ancient times to borrow any thing of their neighbours: I also think it a fact of some consequence, that their longitudes and latitudes are so variously and inaccurately laid down, as it may enable us to appreciate the correctness of their boasted observations. I am very glad that the numbers of degrees are expressed in words at length (*mountains, oceans, fires, arrows, suns, &c.*), and in verse, since errors are less likely to have been introduced by transcribers than if they had only written tables in figures. On these and other topicks I hope to converse, when I have the pleasure of seeing you in the course of this month: I trust you will give me a day at my pleasant farm, and will come, like Crishna, decked with holy *Tamála* blossoms. We had a very good meeting on the 20th, and I drank your health in a full glass of liquid rubies from Shiraz. Believe me to be ever, my dear Sir,

Your faithful and
obed^t Serv^t
W. JONES.

* Mr. Davis, while exploring some ruins near Gaur, was attacked and wounded in the leg by a bear, who had taken up his abode in a dark recess. As soon as Mr. Davis had recovered from his wounds, he returned to the spot, sought out the bear, and shot him. The wound Mr. Davis received was so severe, as to render him lame for life.

XXXVII.

My dear Sir,

24 March* [1794] Calcutta.

As a week only of March remains, I am not without hopes that you will pass next Sunday with me at my farm ; and we will then talk of *Jayasinh* and his achievements : I will only say now, that the result of my inquiries corresponds exactly with your account of his death. I have given you a great deal of trouble about the *Tamála* ; but the leaves, flowers, and fruit, which you so obligingly sent, are those of the *Dép'hal*, a very different plant, resembling the *Tamála* only in the form and colour of the leaves : I am equally thankful for the specimen, as it is a new species of *Hypericum*.

I am, dear Sir,

Your faithful and aff^{te}

W. JONES.

The following Letter, with its accompaniment, is attached to the preceding series ; and as it relates to the principal subject therein referred to, viz. the Astronomy of the Hindus, it will doubtless not be considered improper to annex it here.

*From the Right Hon^{ble} Sir Joseph Banks, K.C.B., P.R.R.S.,
to Samuel Davis, Esq.*

Soho Square,

Sir,

March 18, 1790.

The paper you did me the honor to enclose to me was received with much interest by the Fellows of the Royal Society to whom I communicated it, which were those whose studies had been more particularly directed to the History of Astronomy. I enclose to you, Sir, the Remarks made upon it by Mr. Cavendish, who we here consider among the most able men we have. He expressed, as indeed all who saw it did, the strongest wish that you would continue to direct your application towards a study, in which you have the opportunity of illustrating so very essentially the ancient history of a science, possibly the most interesting of any in the whole number : and in case any thing should happen which prevented you from publishing it in the Asiatic Transactions, it seemed the wish of every one that it might be published in the Philosophical Transactions of the Royal Society here ; where, Sir, I am confident you would be received a member, if your ambition led you to wish for that distinction.

* Sir William Jones's death occurred April 27, 1794.

I have taken the liberty, Sir, to send under your address, by the ship *Princess Amelia*, a copy of M. Baillie's *Indian Astronomy*, which I hope you will do me honor to accept, as a testimony of my regard. You will find, Sir, the subject of his Book so similar to that of your present pursuit, that I have little doubt you will be able to correct many errors in it; and I hope, also, you may be able to derive some benefit from the perusal of those parts which are correct.

I beg, sir, that you will believe me, with unfeigned regard & respect,

Your obedient
& most hble servant,
JOS: BANKS.

Remarks by Mr. Cavendish, referred to in the preceding Letter.

I hope you will inform Mr. Davis of the pleasure his paper has given to those to whom it has been shewn, and encourage him to go on with it. Though he has given us the most material parts of their astronomy, yet there are many others which very well deserve to be communicated, and I suppose must be treated on in his author, particularly their manner of computing the apparent places of the planets. Their manner also of computing eclipses of the sun, and determining the longitudes and latitudes of stars at a distance from the ecliptic, with the time of their rising, will be well worth communicating, were it only for shewing the extent of their knowledge in spherical trigonometry. I have added also a few queries, which I shall be glad if you will recommend to his consideration.

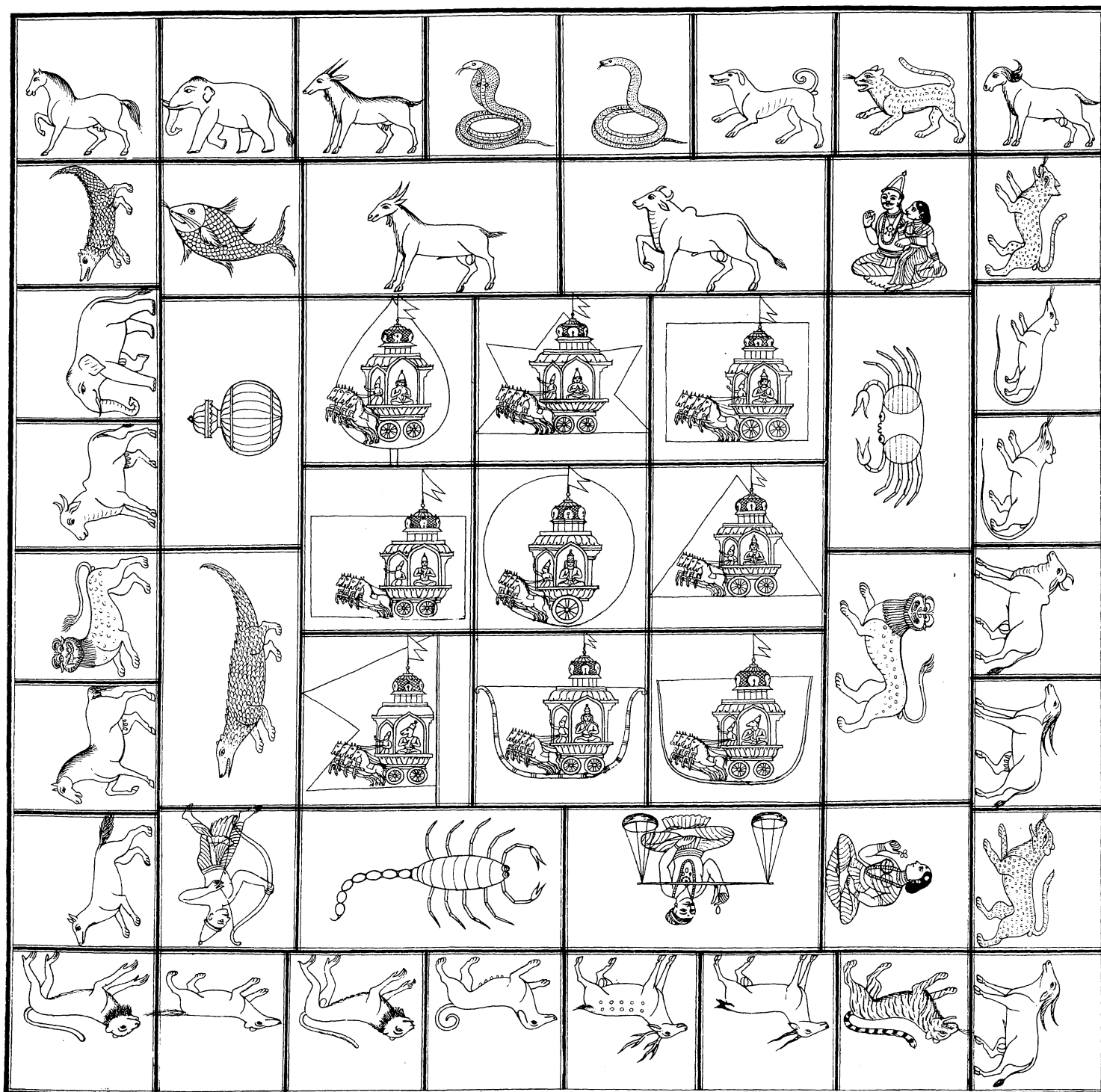
Mr. D. says the astronomical months begin at the instant the sun is supposed to enter the respective constellations of the Zodiac; but the civil month begins at sun-rise. Quere whether the sun-rise after, or the sun-rise in the same day? and as the same month will not always consist of the same number of days, Quere whether they are obliged to have recourse to the almanack of that year, or whether they have any constant rule for determining it? If it is determined only by their almanack, it will sometimes happen that one almanack will make it begin on one day of the week, and another on the next to it, owing to a difference in the latitude and longitude of the place, &c. Quere therefore, whether in dating any event they take any method to avoid this ambiguity?

Quere. Are there any Hindu maps of the constellations?

Besides the general curiosity of seeing whether their constellations agree

A Hindu Zodiac: - from a Choulpy in the Southern part of the Carnatic.

The 9 inner divisions are the 7 Planets with the Moon's Nodes. - The 12 Figures by which they are surrounded are the Signs of the Zodiac. - The outer divisions agree in number (28) with the Lunar Mansions.



with ours, I have another reason for the question. At present the sun at the beginning of the Hindu year precedes the first star of our constellation Aries by $7^{\circ} 18'$, and 4000 years ago it preceded it by $16^{\circ} 51'$, and therefore it is natural to suppose that, at the time when their constellations were formed, the first star of the constellation Aries coincided with the sun's place at the commencement of their year. It should seem that our Zodiacal constellations, though they bear the same names as theirs, consist of different stars. Perhaps if such maps are found, it might afford a means of giving a rough estimate of the date of their astronomy.

A catalogue of the fixed stars, with the longitudes and latitudes, would in some measure answer the same purpose, but not so well.

Quere, Have they preserved any ancient astronomical observations; and if so, how ancient?

Quere, Is there any account of the manner in which they used to make their observations, and in particular in what manner they measured time, and whether they still continue to make observations.

On computing the places of the heavenly bodies from the data given in Mr. D.'s paper, for the beginning of the *Calì Yug*, and for 4320 years after, I observed that in general they agreed much better with our tables at the last-mentioned time, than they did at the *Calì Yug* or than they do at present; which seems to shew either that the *Súrya Sidáhnta* must have been written about that time, or that the numbers in it were then altered, so as to make them agree with observation.

Quere, Whether there is any tradition of a reformation having been made at that time in their astronomy?

I think Mr. D. must have made a mistake in his computation of the precession of the Equinoxes. Unless I am much mistaken, he ought to have made it $73^{\circ} 21'$. If so, the precession found by their rule differs from the truth at present by $52^{\circ} 17'$, and formerly was still more wrong; so that I imagine the text of his author must be corrupted at that place.

* * * The accompanying Plate appears to have been intended by the late Mr. DAVIS to illustrate the Astronomical Remarks contained in the preceding Letters, and is published principally on account of its representation of the Hindu Zodiac and the Lunar Mansions, differing considerably from those that are engraved in the second volume of the *Asiatic Researches*.

II. *Extracts from the Mualiját-i-Dará-Shekohí* ;* selected and translated
by Major DAVID PRICE, M.R.A.S.

Read March 6, 1830.

TREATISE the Fortieth, comprehending twenty-four discourses on the subject of speech and writing, and the senses external and internal; with, under God's assistance, the preliminary chapter of the *Zád-ul-Musafarín*, composed by Hakím Nasar Khosru, surnamed *Hujat*, the Guide.†

* The *Mualiját-i-Dará Shekohí*, a work of no common magnitude or importance, is a compilation, in three folio volumes, extending through not less than 3338 pages; and contains treatises, or discourses, not only on all the diseases to which the human frame is liable, with their corresponding remedies, but also on almost every subject within the compass of human understanding. The compiler, *Hakim Nur-ud-dín Shirázi*, who appears to have been either grandson or sister's son of the enlightened Abul Fazel, asserts, in his preface, that he commenced his work A. H. 1052, in the fourteenth year of the reign of Shah Jehán (corresponding with A.D. 1642, the sixteenth of Charles the First of England); and that he brought it to a conclusion A.H. 1056, having thus been only four years on his laborious undertaking. Both these dates are respectively comprised (the Persian characters being numerically applied) in the two following sentences:—

دارا شكوهي علاجات *Ilájat-i-Dará Shekohí*. “The Medical Remedies of Dara Shekoh, and این طب عجیب به از جام کیتی نماشده *ín tib ajíb be az jám gítí numá-shudeh*. “This physical wonder is to be preferred to the mirror which reflects the world.”—The work may be regarded as an Indian encyclopædia; and the articles here given from it are the more curious, as the copy in Major Price's possession, from which they are taken, is supposed to be the only one in Europe, unless it be that which was made from it, about thirty years ago by M. Bruys, formerly a French resident at Surat, for the library of the King of France.

† Hakím Násar-ibn Khosru, the author of the *Zád-ul-Musafarín*, or Traveller's Viaticum, from which the compiler of the *Mualiját-i-Dará Shekohí* has so largely borrowed, was a genuine Khoresh, and must have written under the short reign of *Ul-Wathek*, the ninth khalif of the house of *Abbas*, who ruled over the Musalman world between the years 840 and 847 of the Christian era, when Ethelwolf, the son of Egbert, sat on the throne of England. He is said to have been particularly distinguished by his protection and patronage of the unfortunate but still venerated race of *Fatima*. Ali Rezza, the eighth imám, and great-grandfather of Nasir-ibu Khosru, died under the reign of Ul-Mamun, A.D. 818. The tract here given is evidently formed on the system of Aristotle, and the other Greek philosophers, some of whose

This work, which comprises seven-and-twenty parts or dissertations (in the original), I have been contented to bring under four discourses, or lectures, as a sufficient conclusion to the key of my dissertation on the repository of meanings. It is a composition of not less than *eight hundred years* standing, by that genuine philosopher and guide to the true principles of science whose name is above recorded, and whom we acknowledge to have been a lineal and no remote descendant of our venerated Prophet, and who continues to the present day to be the master and instructor of the wisest of the moderns in the sphere of the understanding. To his descent we have the testimony of his own words in the following couplet:—"I, who am the Prophet's truest heir—I, Nasar, the son of Khosru, son of *Háreth*." Now *Háreth* was one among the children of Khorasan's royal Imám: accordingly, all such as have treated on the knowledge of things appertaining to the faculties of the human understanding, have diligently directed their studies to this excellent work, and thus acquired for themselves distinguished renown.

For myself, let me observe, that although in some things the following discourse may, from unavoidable repetition, have carried the subject to an inconvenient length; yet, reflecting that things repeated stand confirmed, and paying a due regard to the advancement of knowledge, I trust that I shall be entitled to indulgence, remembering that to do a thing well it must be thoroughly done. He therefore that, as far as it is intelligible, has derived instruction or entertainment from the performance, let him take it in good part, and let what is deficient be ascribed to the incompetence of the author. I shall now proceed to my object; and first, to the *Dibáchah*, or prefatory discourse of the *Zád-ul-Musáfárín*.

Eternal praise to that Being, who is the creator of the essences of all things, whether visible or unseen, who holds at his nod the circumstances of all time and position; who is supreme above all question of what and

works are known to have been translated into Arabic under the reign of Ul-Mamun. It exhibits a curious specimen of the manner in which abstract speculations were treated in the East at so remote a period, about the middle of the ninth century, and the opinions then entertained of the operations of the human mind. The illustrious author of the "Essay on the Human Understanding" is generally considered to have commenced his work in the year 1670, more than 600 years subsequent to the date of the *Zád-ul-Musáfárín*, and not to have completed it till sixteen years afterwards.

where ; and whom, as the giver of sense, we are permitted to call Omniscient and All-seeing ; his is the eternal power of decree—it is ours to submit and obey ; and to the messenger of truth, the prince of all prophets, Mahommed the prophet of God, be endless gratulation ; to him that is guide and instructor in all that is virtuous in understanding, and in language true.

First we shall speak of time, as the obstetric medium through which the varieties of vegetable and animal creation throughout the universe are ushered into life, and made to appear under particular forms ; such forms being prior to element which belongs to nature. The principle of production is endowed with life, but the element is perishable. Time, again, is included in duration. Every thing allowed to arrive at perfection, whether in man or other than man, is finally also destined to perish, through the same means and gradation by which it was produced : for thus, in the sacred volume, has Omnipotence pronounced, “after decay comes reproduction, and after reproduction decay.”

Of every person endowed with intelligence, it is the duty to search into the nature of his existence, whence he came and whither he shall go, with a prudent foresight to reflect that here he is engaged on a toilsome journey, in which there is neither delay nor standfast ; for while in this world he is under the influence of a two-fold action—that of increase and diminution, from which there is no exemption.

But there can be no action or motion unconnected with time, and time is a thing which moves in two separate sections, that which is past and that which is not yet come ; and between these two there is an interval which is incapable of division—like the line between the sun and the shade, which belongs neither to sun nor shade. This interval between the divisions of time is known in Persian and Arabic by two different names bearing the same signification : *now*—which has neither distance nor extension, belonging neither to time past nor that which is to come. Such denomination of interval which we have called *now*, becomes, however, necessary to mark the progress of bodies in motion. And it is by the same interval that things in motion are to be discriminated in the revolutions of time. The subject will be further spoken upon in its proper place in the course of this work.

Through life, therefore, man will find himself placed in this interval

of *now*. The time past is ever on the increase, in proportion as these intervals are adding to it; every hour and portion of time being made up of the numerical parts consisting of those transcient intervals, *just as in numbers the aggregate of millions* is but the accumulation of units one upon another. In a corresponding degree, also, will the division of time to come be diminished.

If, then, he has common prudence, man will remember that he is just in the situation of a traveller, in whose journey there exists not the possibility of arresting his progress, not even for the twinkling of an eye, until he has fulfilled the measure of that line which is the allotted time of his existence, made up of the interval points to which we have now repeatedly alluded. In such circumstances, the traveller, if he is wise, will seriously enquire whence he came and whither he is going; and having, as far as possible, ascertained the former point, to prepare himself for the knowledge of what in future he is to be, it behoves him to make the requisite provision for his journey; for without such precaution his course will be full of peril. For that we are but passengers here on earth, God Almighty has mysteriously pronounced, when, in his word, he commands us to lay up provision.

This being the case, and observing that the greater part of mankind are regardless of what so deeply imports them—that, ignorant of the truths of their common religion, they have held them in contempt; not standing upon the types and demonstrations, and rejecting with equal obstinacy the occult and mysterious meanings of God's word; that, adhering to the corrupt and absurd speculations of their own fancy, they have blindly fallen off from all that is just and benevolent; that, arrogating to themselves the supremacy in accordance with their own conflicting lusts and propensities, they have produced a serious dissention among the faithful; and finally, dared, under the name of *kirámati*, to brand with the stigma of imposture, infidelity, and heresy, all those who, better instructed in the principles of divine revelation, better sighted to penetrate to the sources of truth, are labouring to separate the things essential to our welfare in eternity, from the senseless vanities of this perishable world. Observing, I say, all these alarming circumstances, I conceived it incumbent upon me to compose a work relating to the subject; and, in conformity with my views, I have bestowed upon it the title of *Zád-ul-Musáfarín*, Provision for Wayfarers, imploring the grace of God to aid me to its completion.

In the first place, I shall undertake to demonstrate to the discreet and prudent, by proofs and arguments both verbal and intellectual, from whence came man, and to what he shall return. From the inspired assertions of the Korán to make it manifest, that the Prophet's mission was designed to awaken mankind from that sleep of ignorance in which they had for a long time been previously immersed, and to bring those unacquainted with true religion, and so enslaved to their own conceptions, inclinations, and opinions, as to have lost all knowledge on the subject of genuine theology, and of the mysterious meanings conveyed in the code of divine relation, once more under the controul of the true faith : for of all prophecy such must ever be the object. And it is sufficiently known that the subject of the Prophet's grievous complaint to his Maker was, that the people evaded the meanings of the Korán, and adhered to the visionary speculations of mythology.

Of the intelligent reader, in the mean time, I would intreat that he will make this book the subject of his deep and most serious reflection, so as to secure from it an unfailing provision in his perilous journey through life ; and having so done, he will peradventure think with me, that to have introduced or promulgated a study at once so delicate, difficult, and indispensable to human happiness, is just as if a man were to excavate a deep well, or to construct an aqueduct, to convey from the bowels of the earth to some arid plain, a full supply of the refreshing stream, furnishing, at the same time, to the thirsty traveller the welcome remedy against otherwise inevitable perdition. Let him nevertheless, as he values the inestimable boon, carefully guard the fountain against all access from the irreligious idiot, lest its waters be polluted or troubled by the attempts of folly and imbecility ; nay, lest peradventure it be irrecoverably choked with dust and clay. For the rest, may God so prosper the reception of this work, as it is intended for the instruction of his creatures in the pursuit of what is just and good.

Thus far the prefatory chapter of Nasar Ibn Khusru has been given at length. What follows must be considered an abridgment composed by the compiler of the dictionary, Hakím Nur-ud-din Shirázi.

DISCOURSE THE FIRST.

I HAVE chosen the faculty of speech, which is of the things belonging to the present state of existence, for the leading subject of disquisition in this work, because my principal design is to certify, as well as I am able, to the satisfaction of the intelligent, from whence man came into this world, and where he shall exist in future: a knowledge equally difficult and intricate, whether to discuss or discover. So far, however, is manifest, that one intelligent mind must communicate its knowledge to others, either through the medium of speech or of writing; and the aspirant after knowledge must acquire his information from the learned, through either of the two senses, hearing or sight: the former when we speak, the latter when we write.

Now the speaking medium is so far more noble than that of writing, inasmuch as, through the faculty of speech, the advantage is instantaneous to those present—while through that of writing the profit is remote, and only to those who are absent; and the present must always have the precedence over the absent in the acquirement of knowledge. It is understood that the medium of communication between the present and the absent is the faculty of writing. But the medium which secures an interchange of ideas between the learned and the worthier class, that is, those who have the precedence, is nobler and of a more subtle character than that which is employed between them and the less worthy. It is therefore manifest that speech is more excellent than writing.

Further, the individual present is enabled, through the medium of speech, to obtain from him that speaks information on what would otherwise have been unknown to him; and the speaker is enabled, in other terms, to explain to the hearer what may be less obvious in what is spoken. The readers of a manuscript, on the other hand, when any difficulty occurs, possess no means of explanation when the writer is not to be found; or, though accessible, yet may it happen that he is a person unacquainted with science, being nothing more than a simple copyist. Moreover, speech is the narration of what is lodged in the mind of an intellectual being. That which is written, therefore, is the narration of a narration of that which passes in the mind of the intelligent, whose speech is the narration itself. In other words, speech is the original, and writing the copy; writing is the shell, and speech the kernel of the shell. And thus again it is

demonstrated that speech is nobler and more refined than the faculty of writing.

But the mind of the intelligent is in itself essentially above the necessity of either speech or writing, his want merely arising from the desire of conveying knowledge to others, whether in speech, by means of the tongue, or in writing, by means of his fingers. Speech is, moreover, less obnoxious to doubt or ambiguity than is experienced by the hearer of what is read, or the reciter of what is written; because in writing there are many letters bearing a close resemblance to each other to the eye, while to the ear they are not all alike, as may frequently be observed when the writer sets down such words as *خير جز* *khayr, har, jaz*, and *khaber*, which without the diacritical points, are exactly similar, and in which the reader may reasonably doubt as to which the writer designs to indicate, while the hearer entertains no doubt on the subject: neither does he suspect that, under words which the writer has set down in characters so much alike, something else may be intended than meets the eye. Hence again, I say, and I trust have sufficiently demonstrated, that speech must always have the precedence over writing,

Metaphorically, speech is spiritual, and writing corporeal; and I will also say, that speech is to writing what the soul is to the body; for do you not perceive, in the instance of one who searches into the meaning of things, and it must be for his use that the thing is written, that speech furnishes to the inquirer that information which relieves him from the necessity of perusing what is so written.* I say further, that as speech is the soul of writing, so is meaning the soul of speech; for do we not observe, that when he who hears has secured that meaning which is the basis of speech, he no longer needs either letter or words, but throws all aside, and seizes on the meaning alone.

From these considerations it becomes further manifest, that meaning is

* The construction of this passage is so perplexing, that I am compelled to give the lines in the original: *نه بيني كه چون از نيشت قول مرجو ينده انمعني را كه نيشت از بهر اوست خير* : which, in other words, may be rendered to the following effect; "Do you not perceive that, as by the written medium the searcher after meaning, for whose use the thing has been written, is rendered independent of speech, so is the same, through the perusal of what is written, rendered equally independent of oral information." How we are to understand this as an illustration of the fact, "that speech is to writing as the soul to the body," it would be difficult to explain.—D. P.

the soul to that which is the soul of writing, and speech is to meaning as the body, just as writing is the body to speech; in other words, speech embodies meaning, as writing embodies speech. From the same considerations it must appear that meaning has a more immediate connection with speech than it has with what is written. But the object of both writing and speech is the meaning of a thing; and that which is nearest to the object is nobler or more excellent than that from which the object is more remote. Now the object of every wise man is the meaning, and we have demonstrated that speech is more closely connected with meaning than what is written.

If it should be asked, "what then is speech?" the answer is, "speech is an arrangement of words or names, under which is invested some certain meaning. Should it be asked, "what is name?" I would say that it is composed of letters, regularly united, to indicate certain essential principles or sources of things. And should it further be demanded, "what, then, is letter?" I should answer, that letter is in the same degree of relation to name, as the point is to a straight line. A letter has in itself no meaning, although a meaning may exist under letters, when produced by intelligent minds, in combination, and under names generally known to a certain class of men, just as a point, which has no extension until it is manifested in length, when it becomes a straight line; and this consists, we know, of points accumulated together, *ad infinitum*. Of length I shall observe, that is called the primary extension.

In the next place I shall state that, to the specific form of the faculty of speech names or words are the matter, and to the specific forms of names letters are the matter; just as to my shirt a piece of cloth is the material principle, and the material principle of a piece of cloth is a certain vegetable production called cotton, of which the material principle is in nature itself.

Further, I shall state that the faculty of speech can exist no where but in man, through the medium of sound, and there can be no sound but that which is produced by the escape of air between two substances in collision. Until, however, sound has obtained extension, the specific form of speech cannot rest upon it; that is to say, until the air included within certain substances by which it is retained, shall, by collision of such substances, be forced to escape through some channel, narrow and confined,

that lengthened or protracted sound necessary to speech cannot be obtained.

Thus, a human being draws breath by means of the lungs, and retains it in the hollow of his chest ; then, without discharging the air thus received into the chest, it is protruded by the same organ of the lungs through the natural channel of the throat, and the sound produced becomes either fine or more powerful, just as the throat is contracted or widened ; that is to say, by contracting the throat the sound becomes finer, and by widening becomes stronger. The sound then entering the mouth, it is borne about between the palate, teeth, and lips, until being arranged into words, part escapes through the nostrils, and part through the teeth and lips, thus expanding into speech, and ushering into light what was before concealed.

Then I say that protracted sound may be compared to a straight line extended out, which the speaking breath, or rather the reasoning faculty, breaks into parts between the tongue, teeth, and lips ; and such parts being again shaken into links or nodules, under various figures, such nodules and figures become words—but to the ear only, not to the eye ; and each three or four words being more or less shaken, they assume the specific form of some certain name or thing, indicating, to such as are acquainted with the denomination some particular and essential principle. When they reach the ear these words have been adjusted into order, and the operation thus accomplished by the reasoning spirit, or breath, upon such forms, might be said to be the impinging of sound upon matter, *هيو لي*.

What I have above advanced with respect to lungs and air, to throat, breast, palate, teeth, tongue, and writing, must be understood as considering all to be adjusted into form and order through the operation of the same reasoning spirit, or breath endowed with reason ; which having constructed all from the parts of a straight line, finally reduces them into known and intelligible nodules and figures, much in the same manner as it produces on protracted sound. But though the reasoning spirit or faculty is here said to operate on the parts of a straight line, which may be considered to resemble a full and lengthened sound, the operation, in the one case, is conducted in a different manner from the other ; for in the instance of the straight line it is conducted through the medium of the hand, with the implements of pen and ink, and paper. Now the hand, it is to be observed, is considerably removed from the abode of the reasoning spirit,

which is in the brain ; but in the act of speech, the energy of that spirit is exerted upon the lungs, the breast, the throat, mouth, tongue, and lips, all of which are endowed with life, and all more nearly situated to the brain, the central abode of the reasoning spirit. It is for these reasons that the object of the reasoning faculty is more perfectly known to the hearer, through the medium of speech, than to him who reads, through the medium of what is written.

Since, then, speech is more immediately derived from, and in situation more closely connected with the reasoning spirit, than can be alleged of the faculty of writing, the operation of the mind being more remote from its object, through means thus artificial, which means, at the same time, are destitute of the vital principle, I say that speech is like the immortal spirit, while writing is the type of the perishable body ; and therefore I contend that the searchers after knowledge will sooner arrive at their object through this living and spiritual medium of speech, than through the other corporeal and perishable one of writing. Such is my discourse upon Speech.

DISCOURSE THE SECOND.

ON THE FACULTY OF WRITING.

WRITING is included among the mathematical sciences, and is peculiar to man alone, to the exclusion of all other animals ; for other animals, however destitute of the faculty of reason, participate with man in the power of speech and of mechanical contrivance, but not so in writing. Thus there are animals which participate with man in language, the greater part of them making use of particular calls to one another, which are to them in the place of speech to mankind. Most irrational animals also will utter, in safety and repose, sounds very different from what they do in alarm or weariness. The domestic fowl, for instance, has a call peculiar to itself, by which it makes known to its mate its sense of peace and enjoyment ; and the key in which it warns its kind of the approach of danger, when the bird of prey is hovering round, is distinguishable by all. The notes of the male, when inviting it to its roosting-place, or to lay its egg, as if in the voice of command to deposit its burden, are not less distinct and intelligible.

These various sounds, then, by which its manifold wants are made known to its kind, are to the animal in the place of speech.

In mechanical contrivance, also, the irrational animal partakes with man. In the instance of the spider, which weaves its own dwelling ; in the bee, which fabricates its abode with such elaborate symmetry and regularity, without the appliance of clay. We are acquainted with birds, also, which perforate even timber for their abiding places ; and with others which build their nests of clay, with doors to them, through which to lodge their store. There are moreover other animals which, in contrivance and skill, man, with all his boasted pre-eminence, would in vain endeavour to imitate : such is the silkworm, which spins its thread from the leaves of the mulberry ; such the bee, which compounds its honey from the blossom ; and such the shell-fish, which concocts its pearl from the fluid of the ocean. Others might be mentioned, but this is sufficient to shew that, in artificial contrivance, there are animals not less endowed than man ; but in the faculty of writing there is no animal that participates with man.

Writing, then, allowing the precedence to speech, is peculiar to man alone. But speech is more universally common to man ; because, though every writer is a man, every man is not a writer ; and every writing is a speech, though every speech is not a writing. He, however, that is master of both faculties, both peculiar to the wise and prudent, approaches nearest to the perfection of manhood.

Again, speech stands in the place of writing, to which the tongue of man supplies the pen ; the lengthened sound or voice is in the place of a right line, and to letters and words the ambient air supplies the tablet, the air reflecting, though it does not retain impressions : and hence it is that speech is so evanescent.

Writing, on the other hand, may be described as that sort of speech to which the pen supplies the place of tongue ; a right line that of protracted sound or voice, the figures and words of which may be permanently retained on any smooth surface, whether of earth or clay ; for clay, we know from experience, is capable of retaining impressions when inscribed upon it.

The peculiar excellence of writing, however, consists in this : by means of the pen it conveys information from the wise and intelligent to those that are absent, and from the past to future generations ; whereas speech is of advantage only to those present on the spot, and that by verbal commu-

nication through the tongue. Another excellence peculiar to what is committed to writing, is its being conveyed in a language in which the characters are in the place of sound ; and what is spoken by the writer remains unchangeable so long as the character stands unobliterated. The writer having thus placed himself as much beyond the power of disavowal, as if the utterance had occurred in the hearing of any number of witnesses.*

Writing then, is that sort of speech which is self-enduring after the speaker shall have ceased from speaking : furthermore, the words and figures that are written are to the eye what the words and figures that are spoken are to the ear ; but there exists before the eyes of him who cannot write a veil to which he that can write is a stranger. Nevertheless, both are equally capable of seeing the forms of words and letters, as of other things visible to the eye ; and this is the case with him who hears a conversation, and yet acquires no knowledge of the thing spoken of, neither collects any meaning from the sounds which strike the ear, while another both hears the conversation and comprehends the meaning. Both these parties are hearers in appearance ; those who in words or speech do not comprehend the meaning, cannot be well considered as having heard either word or speech, and must be content to collect the meaning of what is said from others ; just as he who in a piece of writing does not comprehend the design of what is written, cannot be said to have seen the writing ; and just as one that in common sees as well as another, and yet in some particular cannot be made to see, may be considered as blind, since, in this respect, he foregoes the advantage of vision. In the same manner, he who hears what is said equally well with another, and yet will not attend or understand, may be considered as deaf, and having foregone the advantage of hearing,† and must accordingly submit to the superiority of that other.

From what I have stated, it must appear that among mankind, with eyes to see and ears to hear, there are many nevertheless who are blind, and many that are deaf : we have indeed a passage in our sacred code, which compares those who possess the power of speech, and sight, and hearing, in

* This passage is so ambiguously expressed in the original, that it has been difficult to give it any sort of literal translation, the reader must judge, پس کسی که آواز شنوند کان همی شنود منکر

نتواند شدن که من این همی نکویم

† همچنانکه کسی مر گفته را با دیگری برابر شنود و همی نشنود او کر باشد واضافت او بران دیگر کرده شود

such circumstances, to the dumb, the deaf, and the blind ; a proof that man requires both eye, and tongue, and ear, other than what he possesses in common with his fellow creatures.

I shall lastly state, that speech is the sign of reason, and reason is to the soul the essential principle, as writing is the manifestation of reason produced. Hence it is, that either of two intelligent persons, when so disposed, can invent a writing which none but himself can read, and a language which none but himself shall comprehend. So also a child, when the speaking faculty impels, is observed, in his efforts to speak, to give names of his own to limbs or members of which he has not learnt the names. But a person who has no knowledge of writing makes no attempt at writing, though the latter be an attainment to be acquired by human application, while speech or reason is the spontaneous gift of the Deity.

He that is intimate with the arrangements and gradations of mathematical science, soon finds that each separate science opens to him another eye and another ear, and furnishes him with another tongue, with neither of which he was before acquainted. When a man disregards the dictates of wisdom, and will neither submit to labour nor study in the pursuit of knowledge, the eye is closed to him by which he might contemplate the figures in geometry, and so is the ear against hearing the arguments and decisions of the judicious ; and the senses of sight and hearing, which he has received from his Creator, are to him thus rendered unavailing.

DISCOURSE THE THIRD.

ON THE EXTERNAL SENSES.

THE mind of man acquires the faculties of speech and writing, which are the sources of knowledge, through the medium of the two senses of sight and hearing : hence I have taken occasion to enlarge on the external senses in general. The five senses in the body are to the mind as so many instruments by which it derives its comprehension of things. Among the senses, some are however of greater excellence or importance than others. This superiority consists in their greater or lesser tendency to good or evil ; in their effect to enable the animal to seek that which is good, and to avoid that which is pernicious.

But the superior excellence of one sense above another in the irrational animal is different from what it is in man. In some cases it may be similar, while in others it is the very reverse. In the irrational animal I shall then say that the sense of touching is the more perfect, because it pervades the whole body; the more useful, because it enables the animal the more readily to perceive and avoid the dangers which might otherwise prove its destruction, and through the attraction of the sexual intercourse to seek its mate, and in the act of procreation to preserve its species from extinction. In the sense of taste the usefulness to animals consists in its enabling them to select their food.

But the sense of touching in irrational animals excels that of taste, inasmuch as in them the sense of taste is peculiarly feeble. Being little capable of discriminating flavours, it is through the mere operation of their digestive powers, and the cravings of hunger, that they become inclined to their food. That the sense of tasting does not enable them to distinguish that which is pleasing from what is disagreeable, is particularly observable in fish and granivorous birds, which swallow their food without mastication. By the sense of touching, on the other hand, they are directly able to reject that which is injurious or hurtful, and, as already observed, disposed to pair and continue their species.

The sense of hearing is to irrational animals useful, but in a small degree, since there are many animals entirely destitute of it: such are serpents, fish, ants, mice, locusts, some birds, and many others that might be mentioned. But being unnecessary to their existence, and to the powers of propagation, to animals the most important property, it has been thus denied them.

Of the sense of smelling, the advantage to animals consists in its enabling them the better to distinguish in their food that which is wholesome from what is noxious or injurious—to reject among vegetables that which is poisonous, and in water that which is salt or otherwise deleterious. By this sense it is that the animal distinguishes in vegetables that which is destined for its peculiar sustenance. In the sense of smelling, indeed, it is considered that irrational animals excel beyond all others; for do we not see that it is by the sense of smell that the pointer or spaniel discovers its prey in the flood or on the field? that the industrious ant in the earth perceives the grain of corn scattered at its door, and is thus enabled to convey it to his nest.

Numerous are the benefits which the irrational animal also derives from the sense of sight, for by this among animals he distinguishes his natural foe, just as by that of smell he discriminates what is noxious among vegetables. It is by the sense of sight, also, that he finds out his friend, and that he avoids the fountain, the fire, and the flood, wherever it may be the terror of his species.

To the rational mind, however, the sense of hearing is paramount to all the other senses; for the pre-eminence of the reasoning animal, above all others, consists in its capacity of acquiring knowledge. The individual who does not possess the sense of hearing, can neither arrive at the faculty of speech, nor attain to any skill in mathematical science nor in the sacred mysteries of theology. Nay, the man that is deaf, and cannot speak, may be said to be cut off from the scale of human beings.

But the sense of smelling is to the rational soul inferior to all the other senses; because from one of the greatest evils of which this is the source, we are relieved by any deficiency in that sense; for although we may be thus abridged from the enjoyment to be derived from fragrant substances, we are, at the same time, in the situation of him who, without the sense of smelling, is safe from the annoyance of what is putrid or offensive.

The sense of hearing is, to irrational animals, or such as are destitute of the faculty of speech, the least important of the senses, as that of smelling is the most valuable; while in man the sense of smelling is the lowest, and that of hearing the most important. The sense of tasting is also most delicate and acute in the human species; for do we not observe that, through the medium of this latter sense, the appetite of man is attracted to that which is most delicious in flavour—that pleasure which, after experiencing the cravings of hunger, he is thus qualified to enjoy, in a degree to which the irrational or dumb animal must be a stranger.

But the pre-eminence of the rational over the irrational animal is that which he derives from the possession of knowledge, in which the irrational can have no participation. Now the mind of the uninformed man, who may be considered not far removed from the condition of a brute, must derive its knowledge from the intelligent, who may be considered as in the scale of angels, through two different channels: one, the sense of hearing, which comes under the semblance of speech; the other, the sense of sight, under the semblance of writing, when instruction has been previously conveyed:

and thus does he ascend from the scale of the brute creation to that of angels. In man, therefore, these two senses bear the pre-eminence over the other three.

Of these, however, the sense of hearing has the preference before that of sight ; because, although a man be born without this latter sense, he may acquire the faculty of speech and reason through the sense of hearing alone, and so attain to a proficiency in many branches of science, supposing that he is in perfect possession of that sense, excepting only that he cannot form any precise idea of colours or figures ; whereas, if a person be born of his mother without the sense of hearing, he will never be able to speak, nor acquire any sort of science, be his sense of sight ever so perfect, excepting that by the aid of signs and example he will be able to acquire some mechanical craft.

But with respect to the knowledge to which we may attain by the nature of the reasoning principle, the peculiar excellence of the human mind consists in its coming prepared from its creation for the acquirement of science in all its branches ; just as the animating principle in nature, fraught with the germ of growth and increase, sends forth its productions prepared for growth and increase. Thus the perfection of this animating principle in nature, in its operation on the stone of the date, is seen in having rendered this stone capable of growth, and of producing a noble tree.

While in the present state of existence, the rational mind or spirit acquires all its knowledge by means of the faculties of which we have spoken ; and these faculties are brought to operate through their own intrinsic excellence. The senses of hearing and sight are, however, to the rational animals, the noblest of their faculties ; but to animals without speech or reason, these two senses are attended with none of the benefits which we have endeavoured to enumerate, those benefits being destined alone for the rational mind.

He that has ascended to the highest stages of science will have found that at every step his sight and hearing are gradually on the increase ; for do we not perceive this in mathematics, when a man has entered the class of arithmetic, and he is asked what is the primary and what the secondary in numbers ? When he becomes instructed that in numbers some are defective, as the number four, the parts of which are a half and a fourth, being three less than itself by one when added together ; some are redundant, as in the number twelve, the parts of which are a half, a third, a fourth, and a sixth,

which, when added together, make six more than itself [rather three]; and some are medial, as in six, of which the parts are a half, and a third, and a sixth, which added together make six like itself; the consideration of these numbers will discover to him what he did not previously perceive. So, when he is instructed that every number is composed of the halves of its two sides when added together, he will not comprehend the fact until further explained. But when they cause him to hear, for example, that four is the sum of the half of its two sides,* five and three, added together, the half of five being two and a half, and the half of three one and a half, which, added together, make four, he not only hears but his sense of hearing is materially improved.

Furthermore, when he comes to the geometrical branch of the sciences, and it is stated to him that the product of two sides of a square, when added together, will be found equal to the product of the sectional parts of such square, he will neither comprehend the statement nor see the effect, until they place before him the figure of a square, divided by two right lines into four sections, and each section is again divided diametrically into two parts, so that a square shall be produced from these four sections, each side of which square, being the diameter of each of the sections of those four sections, shall be equal to two.† Thus shall he be made both to hear the statement and perceive the figures; and thus shall he have acquired, by his progress in this science, a sight and hearing of which he was not previously in possession.

Such is the case with relation to the improvement in sight and hearing which a man will acquire as he advances in the different branches of science; and thus he that ascends the higher in the scale of knowledge becomes hourly more perfect both in sight and hearing: while he that remains stationary continues both blind and dumb, in the condition of the

* Probably meaning the figures on either side of it.

† I have been quite puzzled with this passage, and therefore must give it in the original!

که مضروب و دو ضلع مربع چون جمع کرده شود با مضروب قطع مربع برابر آید نداند که چگونه
همیگرددش و نه شود مرانرا مکر انگاه که بیاورندش و شکل مربع که مرانرا بد و خط چهار قسم
است کنند و باز هر قسمی را ازان بخطی که قطر او باشد بروپاره کنند چنانکه مربع بی پدید آید
ازان چهار مربع که هر ضلع ازان مربع قطر هر مربعی ازان چهار مربع متساوی بد و بیا بد
The proficient in mathematics will be able to state this with the proper precision: it is pro-
bably designed to indicate that a square is equal to all its sections, however subdivided.

brute beasts, and though he possesses in appearance both eyes and ears, can neither hear or see what is said or shewn to him by those who are more prudent than himself;—according to what is recorded on sacred writ, of the idle and negligent sinner.

It is however to be observed, that he alone is to be stigmatized with the guilt of negligence, who is known to neglect a duty which he possesses the means of discharging. But the attainment of knowledge is within the power of every man, and he that is behind-hand, or remiss in the attainment, may with justice be condemned as negligent in a very culpable degree. The path of the prudent man leads him to the knowledge of the works of his Creator, and what best contributes to display them—to approve and embrace the different branches of science wherever they are attainable, but more particularly where they lead to his instruction in the mysteries of theology, in its genuine source among the inspired writers, the prophets sent from God.

In short, the wise man will not expose himself to the awful risk of eternal misery by a reckless abuse of his allotted time, but exert himself to obtain for his eyes and ears both sight and hearing, through the diligent study of those sciences which treat of the power and attributes of the Deity, so as both to hear and perceive the essential truths indispensable to his welfare here and hereafter; to receive instruction in the knowledge of God; and in contemplating the wonders of his creation, not to rely upon the eyes and ears which he possesses in common with other animals:—and this, as he hopes to attain to the perfection of humanity, and to escape from the condition of the brute.

DISCOURSE THE FOURTH.

ON THE INTERNAL SENSES.

THE meanings or ideas received from the faculties of speech and writing are conveyed to the mind of man through the medium of the internal senses, through which it is enabled to entertain, deliver, or hold possession of such ideas. The external senses are, however, necessary to produce sensation, and the internal to excite reflection. Sensation is derived from speech through the medium of sound, as by words, and syllables, and letters spoken

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out, as well as from writing, through words and letters written down. Intellect, or reflection, is produced when ideas committed to writing are enunciated in speech, or exhibited to the eye when words spoken are committed to writing.

The internal senses of the mind are such as the following :—imagination, conjecture, reflection, memory, retention, that is retaining in memory. We have already observed, that he who is born blind cannot, in imagination, make any conjecture as to form or figure, any more than he that is born deaf can have any notion as to the nature of sound or echo. It is evident, then, that the internal senses of man are directed through the external.

One of the internal senses is conjecture, or suspicion,* which gives motion to reflection† the primary movement of the understanding.‡ After conjecture follows perception;|| but there can be no conjecture where there is no perception. Conjecture is, however, more liable to error than perception, because man conjectures that many a thing is salutary which is pernicious, and many a thing pernicious which is salutary. The difference between perception and conjecture is, that perception operates only while a man is awake, whereas conjecture is at work whether he is asleep or awake. By his perception, also, man feels only what is present, while by conjecture he can view both what is present and absent.

Conjecture, which must here be taken for instinct, is to the irrational animal what intellect,§ or reason, is to man, for conjecture is more feeble in its operation than reason. The intentional movements¶ of man proceed from reflection, which is an operation of the understanding, while those of the irrational animal proceed from conjecture or instinct; and this is a movement or affection by which the animal is led to select its food, to seek its mate, and to avoid its adversary.

Conjecture again, or instinct, is a faculty which receives its perception through the medium of the air; or it is the faculty which conveys to the senses the impressions with which the air is fraught. Imagination** is the faculty which distinguishes from matter†† the forms introduced through the senses, and retains them; and this is seated in the anterior part of the brain. It is moreover the faculty of the imagination that consigns the forms of

* وهم
‡ عقل

† فكرت
¶ حركات قصدي

‡ عقل
** قوة متخيل

حس
†† هيولي

things imagined to the memory,* which is one of the internal senses, and its seat is in the posterior part of the brain. The faculty of remembrance† searches for that form which has been so consigned to the memory; for memory is prior, and then remembrance; because until a thing has been retained in the memory there can be no remembrance of it.

The imagination, or imaginative faculty, consigns to the memory such forms or images as the individual, through the delineations of speech and writing, distinguishes from matter; and the memory retains such forms in possession: but every form or image which penetrates the memory subsequently to, or perhaps independently of the imagination, must be conveyed to it in a written shape, and the memory recognizes its identity; or being written parallel, it perceives some difference.

Now when the faculties of the mind have found a place there where there exists no bottom, forms to infinitude may be lodged therein, although there be a separate place for separate forms (or ideas).

The imagination then, when it distinguishes forms from matter, may be compared to a man who in the act of writing distinguishes the forms of spoken language from the matter, which is air converted to sound—that is to say, the air which transmits a sound in speech; and who discriminates the written form from matter consisting of paper and ink, inscribing these forms without matter on the faculty of the memory.

Now that which is thus accumulated in the human memory may not unaptly be considered as mental scripture, or record, which, with the pen of the imagination, the mind has inscribed on the tablet of the memory: for do we not observe, with regard to the memory, that when a man has learnt by heart some fact that has been committed to writing, all that has been written, in word, or letter, or syllable, must have been in a manner engraven thereon. This, then, is nothing but the separate form or idea which the imaginative faculty, after having perceived the writing, hath so discriminated and engraven on the memory.

The faculty of remembrance, reminiscence, or recollection, again, is that which reads such intellectual record, because the recollection can at will repeat such writing when lodged in the memory; and the fact thus remem-

* حافظ

† قوه زاکره

bered will be found exactly such as it was when originally lodged in the memory, just as the thing committed to writing appears as at first written, without alteration. The mind then, through the medium of the faculty of reminiscence, is able to read that intellectual record inscribed on the memory by the imagination, without having heard a word or a letter brought out or recited aloud. In the same manner as when we have in memory a chapter of the Koran, or a passage from the poets, we are able to read or bring it to recollection, or, in recollecting, be sensible that it is deposited in the memory, without bringing out the words, or giving them utterance aloud.

It seems then manifest, that in the same manner as there exists such a faculty as external writing, the mind also possesses internally as well a species of writing, and the tablet on which it is inscribed ; just as, externally, there belong to it the subject spoken of and its expression, so are there both subject and expression internal. The subject and expression of the mind, and that which is externally disclosed, are equally matter reduced to form. Invisibly, therefore, these forms are separated, or rendered distinct, by the most refined of faculties, and these are the internal senses ; the sensations and perceptions, or inclinations,* to whatever extent, finding therein sufficient and unlimited accommodation. Visibly, however, these material forms reside in the bodily feelings, and these are the external senses ; in which we cannot discover two things in one place, but only separately, or one by one, the sensations derived through the external senses crowding so much one upon the other, that their accommodation is extremely confined ; just as we find that two letters cannot be written in the same place without the one effacing the other ; whereas in mental writing, the numerous branches of knowledge, in all its variety, may be contained in one place, without either crowding or narrowness of room.

This discussion is designed to awaken the mind of the prudent man to the consideration of a mode of speech and writing widely different from that which the rational animal, by a protruded sound, inscribes on the impassible air ; or that which the same animal, through the medium of a right line, delineates upon the palpable earth. Until we come to speak of the speech and writing inspired by Omnipotence in revelation, a subject of

* مدركات

infinitely higher importance than that of which we have treated, he that is wise will ponder upon this.

On these and other considerations, that vulgar and absurd opinion which holds that a celestial angel is employed to register the actions of man in a volume, which is presented to him on the day of judgment, must be founded in impiety : and that opinion, moreover, which maintains that the angel Gabriel delivered the revelations of the Korán by *viva voce* communications to the Prophet, who is thus made to have received them through his corporeal ear, must be equally repugnant to truth and experience ; because sound cannot be produced otherwise than by the escape of air from the collision of two bodies. But an angel is incorporeal—unquestionably a spirit—and a spirit has neither fixedness nor bodily place for either the retention or escape of air.

At the same time we can aver that the speculations of folly on this latter subject are repugnant to the express declarations contained in the word of God, which distinctly states that the bearer of divine revelation to the Prophet was a spirit, and a spirit we know to be incorporeal. That which is incorporeal cannot give birth to sound ; and therefore neither voice nor sound could proceed from an angel, which is a spirit. It moreover informs us that the angel Gabriel descended upon the heart of the Prophet, at the same time that he made a visible appearance before his eyes ; for thus the Prophet expresses himself in the following exordium : “ This is the revelation from the Lord of all worlds, descending, through the ministry of the faithful spirit, upon the heart of the most retired of admonishers, and explained in the language of Arabia.”*

TWELFTH MYSTERY OF DISCOURSE THE THIRD.

To know the nature of the *Gharí*, and *Ghariál* :* that is to say, on the divisions of time, and the methods of admeasurement.

The *Ghariál* is an utensil of metal, seven times fused,† of a circular form

* انه لتزيل مرب العالمين نزل به لروح الامين علي قلبك لتكون من النزيين بلسان العربي
مبين

† كهریال and كهری

‡ حفت جوش whether this should signify seven-fold, or seven times fused, must be left to the oriental scholar. There can be little doubt, though thus imperfectly described, that this refers to the ordinary gong on which, in India, under the native governments, the *paraghari* or sentinel strikes the hour.

like a skillet or skimming-dish, but thinner, and of different sizes, large and small, which they keep suspended for use.

By the philosophers of Hind, the day and night have been divided each into four portions, denominated *Pahar*,* in the generality of places of not more than nine, nor less than six *Gharies* duration. The *Ghari* is the sixtieth part of the day and night; which sixtieth part is further divided into sixty other parts, called *Pal*,† and the latter again subdivided into sixty more, called *Bebal*.‡

In order, however, to obtain some medium through which to calculate the progress of time, they contrived a vessel of brass, or some other metal, of the precise weight of one hundred *tángahs*,|| to which vessel they give in Persian the name of *Pankán*,§ for thus sings the philosophical poet Sennai; “Wherefore shouldst thou abide in a world which has for its measure a paltry *Pankán*.” In shape this is like a cup, narrowest at the bottom, twelve fingers deep, and as many wide at top, and perforated at the bottom so as to admit of the passage of a gold wire or probe, of the weight of one *másh*,¶ and five fingers in length. This cup they place in a pan of clear water, where it may be inaccessible to wind, or any thing else that can disturb or put it in motion; and thus, when the cup through the orifice at bottom has admitted water to the brim, they reckon that a *Ghari* has elapsed.**

Further, these philosophers have determined, that a man in health makes three hundred and sixty respirations in a *Ghari* of time. Six such respirations, therefore, must equal a *Pal*, or the sixtieth part of a *Ghari*; and in the course of the twenty-four hours, a man in health will have made twenty-one thousand six hundred respirations.

* پهر
‖ تانگه

† پل
§ پنگان

‡ بیل
¶ ماشک

** This latter article can be no other than the *clepsydra*, or simple water-clock, anciently employed for the measurement of time; and with these explanations it will be easy to comprehend what is indicated by the strokes alternately slow and rapid, given to his gong by the sentinel at an Indian *darbár*. Thus two or three strokes given slowly indicate the second or third *pahar*; one to six or nine strokes, given more rapidly, mark the *gharies*; and from one to sixty strokes, still more rapidly, indicate the number of *pals* which have expired of the *ghari*. It may be necessary to add that a *ghari* appears to be exactly twenty-four minutes.

THE THIRTEENTH MYSTERY OF DISCOURSE THE THIRD.

To know what constitutes a *Koruh*; or, on the measure of distances: taken from the *Akbar-námah*.

Our august sovereign, who holds the empire of the world, considering that the survey and measurement of roads have an essential influence on the prosperity of nations, has devoted much and serious attention to the subject; it was therefore not without the fullest deliberation that he finally determined to estimate distances from place to place by the measurement of a *Korúh*,* each *Korúh* consisting of one hundred cords,† and each cord or chain of fifty royal *Gaz*; also of four hundred poles,‡ or bamboos, each of twelve *Gaz* and a half in length; either of which will give to the *Korúh* the length of five thousand *Gaz*.

Shír Khán had previously determined the *Korúh* at sixty *Jarib*, each of three hundred *Sikandari Gaz*; which obtained in the government of Delhi. In Malwah, the *Korúh* comprized ninety cords, or chains, each of sixty *Gaz*; and in Guzerat, distances were estimated by the *Gau*, or ox, || that is to say, the distance at which the lowing of an ox may be heard at the hour of repose, or perhaps in the stillness of night; which those who have had experience on the subject have determined to be fifty *Jaribs*, or fifteen thousand *Gaz*. In Bengal, again, they reckoned by the *Dhibiah*,§ which has been determined to be the distance that a person swift of foot can run over in one breathing; or, according to others, such a distance as one may dispatch while a leaf, which has been placed green in the turban, shall have withered.

In works of science of former times, treating on the properties of bodies and of distances, we are instructed that the circumference ¶ of the terrestrial globe is eight thousand *farsangs*; but according to more recent authorities it has been estimated at six thousand eight hundred, both, however, calculating the *farsang* at three *korúh*. But the former authority estimates the *korúh* at three thousand *gaz*, of thirty-two fingers’** breadth each, and the latter at four thousand *gaz* of twenty-four fingers’ breadth.††

* كروه

† طناب

‡ بانس

|| كاوه

§ دهيه

¶ محيط

** انكشت

†† The result of both is precisely the same as to the length of the *korúh*, viz., ninety-six thousand fingers.

The finger's breadth is estimated by both as equal to six moderate-sized barleycorns, placed side by side, with the convex of one to the concavity of the other; and a barleycorn is moreover stated as equal to six hairs from the mane of a *Túrky* horse.*

By others, again, distances are estimated by the *barid*,† which is equal to three *farsangs*, each of three‡ *míls*, each *míl* consisting of two thousand *baia*,|| each *baia* of four *gaz*, and each *gaz* of twenty-four *asba*;§ each *asba* again of six barleycorns,¶ and each barleycorn as equal to six hairs of a camel's tail.

Referring again to the sages of Hind, we are further instructed that eight barleycorns, stripped of the shell and placed side by side on the ground, are equal to a finger's breadth; twenty-four such fingers' breadth making a hand, or palm; ** that four palms make what they call a *dand*, and sometimes *dehang*; †† a thousand *dands* one *korúh*, by them however called a *kos*; ‡‡ and four *korúh* one *jojan*. |||| Last of all, we have it stated, that one thousand paces of a woman, with a child in her arms and a jar of water on her head, are considered to be equal to one *korúh* or *kos*. §§

* It is obvious to remark, that the first statement, which gives eight thousand *farsangs* to the circumference of the globe, reckoning three fingers' breadth at eight-tenths of an inch, thirty-two fingers' breadth to the *gaz*, and four thousand *gaz* to the *korúh* or *kos*, would furnish a total of twenty-nine thousand and ninety English miles, or an excess of four thousand two hundred and fifty beyond the reality. But the second statement, of six thousand eight hundred *farsangs* of three *kos*, gives a total of twenty-four thousand seven hundred and twenty-six miles and four furlongs, being not more than one hundred and fourteen miles below the reality—that is, estimating the circumference of the globe at three hundred and sixty degrees of sixty-nine miles to a degree.

On experiment it will be found that six barleycorns are not more than equal to eight-tenths of an inch, and a *gaz* will then be nineteen inches and two-tenths, about the common cubit. We shall therefore be very near the truth in estimating the *korúh* or *kos* of Akbar at one mile one furlong one hundred and fifty yards and one foot, and the *farsang* of three *korúh* at three miles, five furlongs, and twenty yards.

برید †	میل ‡	باغ ||	اصبع §	جو ¶
دست **	دهنك or دند ††	كوس ‡‡	جوجن |||	

§§ According to this statement the *kos* would be equal to one mile four furlongs twenty-six yards and two feet; and a *jojan* to six miles one hundred and six yards and two feet—estimating the finger's breadth at eight barleycorns.

III.—On BUDDHA and the Phrabdt. By Captain JAMES LOW, of the
Madras Army, Cor. M.R.A.S.

Read March 20, 1830.

THE particulars to be brought forward in this paper relative to the travels of the Siamese BUDDHA,* and the *Phrabdt*, or divine Foot, have chiefly been derived from Bali and Siamese books. It must be premised, that this BUDDHA is the Bali THAKARO SRÍ SACYA MUNÍ KHODAMA, or KHODOM, who is venerated by all the Indo-Chinese nations, and whose doctrines and ordinances materially contribute to form their national character. It is impossible, however, to treat these subjects without being led back to times long antecedent to those of the Siamese BUDDHA; for his worshippers have frequently mixed up with his history traditions respecting the elder BUDDHA. The learned Mr. Wilson, as quoted by Mr. Crawford in the interesting account of his mission to Siam, describes the original BUDDHA to have been a Tartar or Scythian, who flourished 1000 years B.C. But the age of the Siamese BUDDHA was 542 B.C.; and the Bali writings rate it at ten *antara calpas* of years subsequent to the appearance of the third of that name, or PHOKARO KASSAPHO PHUTDO. The same number of *calpas* is supposed to have intervened betwixt each BUDDHA and his successor. The Siamese one, according to the Bali *Ratana Kalapa* (*head Maha Samatí Wangsa*), was SIDDHATTA KUMARA, son of king SUDODHANA and his queen MAHA MAYA. SIDDHATTA married BIMBA, alias SUBHADDA KACHAIYENA, and they had a son named RAHULA.

According to one Siamese account, this BUDDHA visited the following countries:

First. *Singhdla Thipaké*, or *Sihala Dwípa*, which is Ceylon; whither he went for the purpose of expelling the *Yakshas*, or demons, who then ruled the island.†

* *Budha* denotes a sage; *Buddha*, a prophet. (Asiat. Res.)

† The writers on Indian chronology assert, that BUDDHA, the ninth avatar of VISHNU, was born to confound the demons or idolaters, in the 156th year of the *Kali yug*; and that his age

When BUDDHA had subdued these *Yakshas*, he determined to extirpate them ; but not by shedding their blood, since that would have been contrary to the principles he professed to act upon. He therefore ordered the island *Kíri Dwípa* to appear ; and instantly it began to float of itself towards Ceylon. When it arrived, the *Yakshas* were collected and put upon it, and it was then again set adrift on the face of the ocean.*

This expulsion of the *Yakshas* is asserted to have happened when BUDDHA was thirty-five years old ; consequently 588 B.C., and forty-five years previous to his entering *Niván* : at which last period, according to the *Báli Ratana Kalapa*, AJATASATHU reigned in *Raja Gaha*.†

The Siamese also assert, that about the time when BUDDHA entered *Niván*, Ceylon began to be peopled ; and that then a prince called WÍCHAI, a son of Raja SINGHA PHAHANU, of the *Singha* country, went to Ceylon to establish the Buddhist religion.‡

includes five thousand years ; which last is the exact period allotted by the Siamese for that of their BUDDHA, as specified in the *Milinda Raja*, a *Báli* work. Some have supposed that this *avatar* has reference to NOAH, and that he visited India. Like BRAHMA and BACCHUS, he planted the vine in the countries through which he travelled ; but the parallel betwixt them and the latter BUDDHA cannot be carried so far ; since this last, during his peregrination, inculcated, as a main article of his doctrine, a total abstinence from wine. According to BRYANT, DIONUSES, BACCHUS, and BUDDHA, all, in respect to worship, have reference to the sun.

* This description may remind the reader versed in Indian lore, of the *White Island* of the Sanscrit legend, supposed by a celebrated writer to allude to Britain. (a) No account, however, is given by the Buddhists, as far as I have yet been able to discover, of the place where this island, *Kíri Dwípa*, rested. Perhaps the fable may have reference to some catastrophe by which Ceylon was separated from the continent.

† If BUDDHA really visited Ceylon at this period, it could scarcely have been his first visit : for he went to *Vamian*, to defeat the schemes of the *Daityas*, when he was “seven years above eight old ;” (b) and “he obtained a victory over MARA and his hosts on the “sixth month of the ninth year of the cycle.” (c)

‡ According to Wilford, (d) Ceylon was depopulated by the wars of RÁVAN (the THOTSAKÁN of the Siamese), and remained in that state for 1845 years. Which RÁVAN was, according to the *Puranas*, the brother of CAVÉRA, and flourished ann. 1800 B.C. This account seems to correspond with that supplied by Lieut. Mahony, in his work on Ceylon ; who observes, that VIJIRAJA and his followers came in a ship from the eastward in the sixth century B.C. Nearly about the same period, when according to the text, BUDDHA entered into *Niván*, or *Immortality* ; and when his

(a) Asiatic Researches.

(b) Asiatic Researches.

(c) *Báli Ratana Kalapa*.

(d) Asiatic Researches.

In the *Ratana Kalapa* it is stated, that in the 236th year after BUDDHA a prince, called RAJA DEVA NANGPIYATISA, sought for sacred knowledge, of MAHA ARIGATA THERA in *Thuparama*, in *Lanca Dwípa*; and that about the period of MAHA SENA's reign a tooth of BUDDHA was conveyed to *Lanca*; it is also stated in the *Milinda Raja*, that when BUDDHA had just reached that state of perfect rest and abstraction implied by *Niván*, his vase, or vessel in which he collected his daily subsistence from charitably disposed votaries, was conveyed as a holy relic to *Lanca*.

Mr. Crawford* observes, that the earliest Siamese historians date the introduction of the Buddhist religion into Siam about 638 of our era. This nearly corresponds with the period at which, from being a Laos colony, Siam became a separate nation. Still it is not improbable that this religion may have prevailed amongst several of the Indo-Chinese tribes long prior to the date above assigned; since there was an overland route to Camboja and China from India at a very remote period. It is further stated, in the *Asiatic Researches*, that the *Peshkaras* went to Ceylon about the year 77 of our era, when it was overrun with demons. This period was prior to that of PHRIYA KRÉK, a Cambojan prince, whose warlike exploits in Upper Siam and Laos are subjects of Siamese romance, and from whom the common or civil Siamese era is dated; but whose history, if not the same, is evidently modelled on that of WÍHATA RAJA, who was, according to Siamese Báli writings, born in *Ayodha*, and escaped the effects of the persecuting mandate of KATHA RAJA of that country.†

In a Siamese history of Ligor, termed *P,hra Pathom*, but with which much Hindu chronology is incorporated, an account is given of the defeat and death of SÍNGHA RAJA of *Thantabúri* by five confederated princes; of

his religion was probably first disseminated among the Indo-Chinese nations. This was about twelve hundred years anterior to the time when the Siamese branched off from their parent stock, the Northern *Lao* or *Laos*.

* Mr. Crawford's Mission to Siam.

† The Siamese only recognize one *Lanca*, or Ceylon; and have no traditions, that have yet been ascertained, of the Hindú *Lanca*. The *Salmala Dwípa* of the Puránas, according to a preface (therein adverted to) to the *Surya Sidhanta*, commented on by Sir W. Jones,(a) lies at a distance of four hundred and twenty-two *yojanas*, or 3,800 miles, to the east of *Lanca*; bringing it to the Gulf of Siam, and to that part beyond or east of Malacca.

(a) *Asiatic Researches*.

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the flight of his son THANTAKUMÁN, and his daughter HEMACHALA to *Lanca*; their subsequent voyage, for holy purposes, to the peninsula of Malacca, and of their return to their own country.

The second country visited by BUDDHA was, according to this account, *Pharandsi* or *Varanási*, or Benares, the *Cási*, or *Casidia*, of Ptolemy. It is the first of the *Solasa Nagara*, or sixteen countries described, or alluded to, in the *Milinda Raja*; and in which shrines were raised over the relics of BUDDHA. The sixteen *heavens* are invoked by the Buddhists of Siam.

His third journey was to *Raja Gaha*, or *Girha*; which the Siamese term *Racha Khrut haburi*, and place towards Thibet. Its site is too well known to require description. In the *Milinda Raja*, *Raja Gaha* is the first in order of eight countries described as those into which relics were conveyed from MANYA RAJA of *Kusinaraké*, by messengers sent to solicit them of him.

The fourth journey of BUDDHA was to *Sawathípurí*, or, according to some, to *Wesaliyápurí*; which last is the name of the second of eight countries alluded to in the *Milinda Raja*, as those into which relics of BUDDHA were conveyed. *Sawathi* is the second, and *Wesali* the third in order of the *Solasa Nagara*, or sixteen countries described in the same work.

His fifth journey was back to his father's kingdom, *Kábinla* (or *Kápila*), *Wathu Sammí*, where he paid his respects to him, SUDHODÁNA, and to his mother, SRÍ MÁYA, or the Hindu MAHA DEVI.

Sixthly, he again visited *Pharanási*, Benares.

The seventh journey was to *Kalachampaka*, the *Champaka* of the Bali, situated in the south, and probably *Chumpa Nagar*; where there is a Jain temple containing two sacred feet, as described by Lieut.-Col. Francklin.

In the eighth place BUDDHA ascended into *Savatíngsa*, the heaven of INDRA, situated on the mountain whose summit touches the constellation of the alligator: he had, long before this period, assumed the yellow mantle, the symbol of the priesthood. His object in visiting INDRA's heaven was to see the shade of his mother, she having died and left *Jambu Dwíp*. Here he weighed her against the *Dhurma*, or *Bali Writ*, personified; and finding the scales equipoised, he solaced her with the hopes of happy transmigrations, when her allotted time in this bright abode should have expired. He also gave her several Bali formulæ to peruse; amongst which were *Phra Sangha*, *Phra Wébhání*, *Thayamok*, *Po*, *Kat hawát ho*, *Yá*, and *Pa*.

Having remained three months in heaven, he returned, by help of a golden ladder, to *Jambu Dwíp*. This happened on the sixteenth day of the

eleventh month. He was accompanied by INDRA, who carried on his shoulders the holy vase; and by the celestial *Bráhmas*, BRÁHMA PARIE SACHHA, the BRÁHMA PUROHITA and the MÁHA BRÁHMA; and his approach was proclaimed by blasts from the holy shell (*sanká*). A relic of BUDDHA was afterwards enshrined in a *Thupani*, or spiral building, four *yojanas* high, and situated in *Tithassapuri*, in *Tavatingsa*.

*Sangkása** is described as the ninth region to which the steps of BUDDHA were directed. He there staid seven days; during which multitudes of people attended him to ask for religious instruction. He performed miracles, cured the sick, and extended his pity and charity towards all men.

On leaving *Sangkasa*, his tenth journey, according to some accounts, was to *Sakalanghatang*, which must imply *Sagalapúra*, one of the *Solasa Nagara* of the *Milinda Raja*.

BUDDHA is then said, for his eleventh journey, to have performed the grand tour of the four quarters of the world; or, as the Siamese term them, the *t,hoa t,hok t,heett,hang si Thawip*, the four *Dwipas*.

His twelfth visit was to *Magadha*; and seating himself on the stump of a tree (perhaps the *Bogaha* of the Singalese) proclaimed his doctrines. His brother-in-law, ANANDA† (the ANON of the Siamese) here paid his respects to the sage, and presented him with fruit to eat, the *hárítáki* of the Bali; or, according to the Siamese, the *lak sama*; the *myrabolanum phyllanthus emblica* of Roxburgh.

The thirteenth, to the country of *Sri Sakaramani*.

The fourteenth, to *Sopharat-buri*; according to the Siamese Bali accounts.

* The site of this town or place is not described, nor shall it be here attempted to fix it. A speculative etymologist might, perhaps, find it in Egypt, where Mr. Wilford has placed the shell king SANCHÁSURA. A country called *Sangkaya Pariwana*, is described in the *Milinda Raja* as that of a celebrated *Arahanta*, named in the Bali *Ayupala*.

† NANDA was the prince who afforded one BUDDHA protection when he fled from CARS, a tyrant of the East, about A.M. 2400.(a) The third BUDDHA, son of JAINA, according to the author of the "Key to Hindu Chronology," might have been NOAH. "He visited *Magadha*, according to Hindu accounts, in the year 2100 B.C., or two years after the period when king PRADYATA, son of the king of *Magadha*, was put to death by his prime minister. This latter placed his own son on the throne, which dynasty endured till ANDHARA, about 452 B.C., when *Magadha* ceased to be an independent kingdom." This date was 90 years prior to the death of BUDDHA, and nearly agrees with that of his birth, viz. B.C. 462.

(a) Asiatic Researches.

The fifteenth, to *Phaiyasali Sâwat*, where the king of the country entertained him munificently.

His sixteenth visit was to the *Suwâna Bap,hatâni*, the Siamese *P,hok,han thong*, or golden mountain.

The seventeenth to *Chakravân*, or the equinoctial line, and *Ayodha*.

The eighteenth and last journey of BUDDHA was to *Kusîmara* (the *Kosînarai* of the Siamese, and the Hindu *Kusumapûri*, or *Rangamatty*), which was then governed by SAMONLA RAJA,* who was contemporary, according to Siamese Bali legends, with king AJATASATTRU of *Raja Gaha*. BUDDHA here abode some time in a *chaitya*, or temple, and then entered *Nivân*.

The Siamese term the golden mountain, *Khan P,hra Phuthi Batt*, "the hill with the holy footstep of BUDDHA."†

In the Bali *Ratana Kalapa*, extant in Ceylon, it is related that in the time of *Konagamana*, or the second BUDDHA, *Lanka Dwîpa* was termed *Warra Dwîpa*, its city *Waddha*, and its king RAJA SAMIDDHO; and that it contained a hill called *Suwana Kuta*. In the *P,hra Pathom* of the Siamese, BUDDHA is said to have left impressions of his feet at *Lanca* and *Chakravân*.

The Siamese suppose that there was an impression of the divine foot on the continent opposite to Junkceylon; but if by *Chakravân* he meant the equinoctial line, it will bring the *Phrabât* to Malacca. The present golden mountain of the Siamese exists but in fancy. Their principal *Phrabdt* is placed on a raised mound, and lies, according to Siamese charts, on the west bank of the river which descends from *Suwanaphon*.‡

This impression, supposed by the Siamese to be that of the *right* foot of BUDDHA, is covered by a *Maradop* or *Maratapa*, which is, like most of the edifices consecrated to their religion, of a pyramidal form, and is supported by gilded pilasters. The footstep is generally covered with water, which the devotee sprinkles over his body to wash away the stains of sin.

* Perhaps this king was the SAMALYA RAJA, a contemporary of CHANDRAGUPTA and of ALEXANDER THE GREAT, according to the Asiatic Researches. (a)

† Sir W. Jones assures us, that in the *Puranas* mention is made of a *white* mountain on which king SRAVANA sate meditating on the divine foot of VISHNU at the station *Trivirama*.

‡ In M. de la Loubère's map, however, it is placed on the left or east bank. It is about ten miles distant from the banks of that river. Vide M. de la Loubère's account of the *Phrabât* in his History of Siam.

(a) Vol. v. p. 262.

The impression of the *left* foot of BUDDHA, according to the belief of his followers in Siam, is extant on the top of the mountain *Amala Sri Pada*, or Adam's Peak in Ceylon; which, both from its height, and the veneration in which its summit has been ever held by the natives, has attracted the attention of most travellers.

Dr. Leyden has noticed both these impressions under nearly similar names.*

There was a *Phrabát* at Mecca before the time of Islamism; and it no doubt gave additional sanctity to the place, even after the worship or veneration of it became extinct. Similar impressions are stated to have existed in former times on the bank of the Dniester, and in the country to the N.W. of China; and in modern times have been discovered in North America, as well as in various parts of Europe.†

Without presuming to aim at establishing a system, which at best could only prove hypothetical, it may still be remarked, that some sort of connection can be traced betwixt a *Phrabát*, or divine footstep, and that celebrated monument of antiquity called the *Mensa Isiaca*, or Memphine table,‡ which was found, it is said, on a mummy in Egypt by M. Montfaucon; and which displayed all the symbols which adorned the mystic bell of that country. It was about four feet long and nearly as broad, which is about the common dimensions of the *Phrabáts*, only these are longer in proportion.

As the *Phrabát* is an object claiming from the Indo-Chinese nations a degree of veneration scarcely yielding to that which they pay to BUDDHA himself, we are naturally led to inquire why the emblems it exhibits are not all adored individually as well as in the aggregate. It seems to be one of

* Although I cannot at once agree with the learned Wilford, in supposing that *Arahan* was the Siamese BUDDHA, since the Siamese distinctly avow the contrary, by enumerating no less than eight chief *Arahans*; yet the following remark is curious and deserving of attention, viz. "That it was this personage who left impressions of his feet on rocks in very remote countries, as monuments of his extensive travels."(a) And it will have appeared from the Bali account, here given, that the Siamese describe *Phra Phuttha* to have been no despicable traveller, as he traversed the four quarters of the world.

† Essay on Egypt and the Nile in "Asiatic Researches."

‡ The genuineness of this table has, however, been called in question by some writers; although not so in "Maurice's Indian Antiquities."

(a) Essay on Egypt and the Nile in "Asiatic Researches."

those inconsistencies which mark the character of Buddhist schismatics; and it may enable us more readily to reach the real source of their religion, from which so many superstitions have ramified to cross our path in eastern research.

The Siamese priests, questioned by me as to the cause of this inconsistency, were so much perplexed that they could not even frame a plausible reply. It is, they said, the impression of the foot of their lord and master, and must therefore be worshipped, and they added, that any mortal about to arrive at the threshold of *Niván* has his feet emblazoned spontaneously with all the types we see on a *Phrabát*.

Although the Siamese priests, from their worshipping ostensibly one great deified mortal, and his several manifestations only subordinately, may be termed a species of Unitarians in Indian theology, yet many classes, and perhaps the whole of the laity, venerate, and even worship in some degree the whole Hindu Pantheon: nor do the priests apparently censure this conduct; because they consider themselves next in rank to the *Dhammang*, or the Bali personified; above which, and next in this triad, is BUDDHA himself; and moreover that the mass of people have greater need than they of extraneous assistance from supernatural power.*

The sun, amongst other objects, is still venerated under the title of *Pra Athit*, and is invoked by the Siamese people on urgent occasions. At the same time he is not more revered by them than many other sabistical divinities and terrestrial powers and spirits. Mr. Colebrooke has noticed, in his observations on the *Jainas*, that the worship of the sun, which distinguishes the orthodox Hindus, does not seem to have been at any time practised by the rival sects of *Jaina* and *Buddha*. But it appears to me that the sun holds a prominent place amongst the deities acknowledged by the Siamese; although, like other objects which demand the spontaneous homage of the Hindu, they do not give him that rank which there are many reasons for supposing he held in their primary system of worship.

To whatever country or people we may choose to assign the original invention of the *Phrabát*, it exhibits too many undoubted Hindu symbols to admit of our fixing its fabrication upon the worshippers of the latter BUDDHA; of whose positive dogmas it is rather subversive than otherwise,

* Mr. Crawford, in his mission to Siam before noticed, seems to be of opinion that the Hindu gods are only tolerated.

by encouraging polytheism. And further, the intent with which it was originally framed—namely, to embody in one grand symbol a complete system of theology and theogony—should seem to have been gradually forgotten, or perverted by succeeding ages to the purposes of a ridiculous superstition.

That it has ever been connected with the Hindu religion, and partly, at least, with the primeval one, of which *that* is the scion, cannot well be questioned; but it is extremely doubtful if the Brahmans of India were the inventors of it: even although their descendants, as Lieutenant, afterwards Colonel, Wilford * has observed, insist that the *Pra Pada* was made by the foot of PRAVANA; and although, as we find in the Asiatic Researches, and are told by Mr. Maurice, footsteps of the Hindu VISHNU are frequent. Thus, three were left in the fifth *Avatar*; and AKRUR KANSAS, when he came to *Vindravan*, saw in the courtyard of NUNDHA the mark of the divine foot of CRISHNA, and recognized the *Padma*, the *Chacra*, and the *Geda*. At *Chandragurus*, a small hill near the famous Jain statue called *Gomuta Iswara*, symbols of the nature alluded to are still to be seen.

RAGHU, according to Wilford, erected pillars of conquest in each of the *Durpas*; which were nine principal and eleven subordinate ones.†

The Siamese, in strict accordance with the Bali text, acknowledge only five genuine *Phrabáts*, which I shall now endeavour to describe.

The five *Phrabáts* are called, in Bali, *Pancha Prá Pat̃ha*; in Siamese, *Há P̃hra Bát*; in English, The five impressions of the Divine Foot.

THE FIVE IMPRESSIONS OF THE DIVINE FOOT.

FIRST.

Suwanna Malike Phrabát P̃hok̃h̃d̃.

The Siamese allege that this impression is extant on the coast of the peninsula of Malacca, opposite to *Selan*, or *Salang*, as they term Junk Ceylon. And here some notice may be taken of an indication of a totally different species of superstition, said to have been discovered on that island; viz. a *Ráet̃m*, as it is termed by the Siamese, or impression of a *dog's foot*, together with an image of that animal, which is reported to have once existed upon a rock at the northern point of the island, and which are said to be held

* Asiatic Researches.

† Ibid. vol. iii.

in veneration by the Malays along the opposite coast; who, notwithstanding their conversion to a purer and more orthodox Mahommedanism than is now professed throughout most parts of India, are yet wedded to many obscure and unexplained remnants of their ancient superstitions. The modern Siamese however do not regard them.

No opportunity of visiting the spot, when on Junk Ceylon in 1824, occurred to me: nor, indeed, is it of much consequence, while we are sure that there exists a belief that such figures, or objects, were once venerated there. Some credit may be attached to the account, because Dr. Leyden, while treating of the *Anamite* religion,* remarks “that many local and peculiar superstitions are blended with it, such as the worship of the dog and the tiger; traces of which are to be found amongst the mountaineers on the borders of India, as well as in the countries of China Proper.”

Whence so strange a species of belief originated, it would be difficult to determine; but, on a transient view, we shall perhaps be convinced that its dissemination was wide, and its hold on superstitious nations firm.

Thus we have *Sirius*, the celestial barker, whose heliacal rising announced in Egypt the beginning of the new year, and who is otherwise ANUBIS with a dog's head; supposed by Mr. Maurice (from whom these two remarks are taken) to have *typified the god* BUDDHA, or to be the horizontal circle personified.

Terrestrial dogs are mentioned in the account of the mysterious rites of Isis in Egypt. Maurice imagines that THOT, who went from Phœnicia, in the earliest ages of the world, to Egypt, and there erected a great empire, was the true ANUBIS, who was afterwards raised to a conspicuous station in *Sirius*, the brightest constellation, who was also one of the eight greater gods. The *Kouwas*, or watch-dog of the skies, is worshipped in Abyssinia, according to Bruce. Sir W. Jones supposed, that the Gymnosophists of Ethiopia professed the doctrines of BUDDHA; and, subsequently to these authorities, further reasons have been adduced (I think by the late Colonel Wilford), in support of the supposition that BUDDHA was worshipped in Africa. There are in that country the mountains of *Soma*, or the moon: and we know that many accounts make BUDDHA to have sprung from *Soma*; which title is still retained in Sanscrit. Recent travellers have favoured the supposition that Ethiopia gave its religion to Egypt; and we may believe that it was received into Ethiopia from Chaldea, or some

* Asiatic Researches, vol. iv.

central country of Asia : but whether the Buddhist and *canine* superstitions were co-existent or not, it would be no easy task to show.

The dog has howled over the guilty in the infernal regions of Indian, Grecian, and Roman mythology. In the hells of the Hindus, the Burmans, and Siamese, he yells in the ears of the guilty shades, and tears them to pieces. Wilford has shown, that the *Cerbara* of Hindu mythology, one of the dogs of YAMA, is indubitably the Cerberus of the Greeks : but YAMA himself, BUDDHA observed *, is merely a name, and has no existence but in the mind's eye.

The dog is a sign of dignity, both in China and Siam. It appears so, at least, with respect to the former, from the badge which the portrait of VAN-TA-GIN, in "Barrow's Travels in China," wears on his breast. And, with respect to the latter, Siamese writings show that the *Sunakhanám*, or "Dog general," is an honourable title in the field. In Japan the dog is, according to Kempfer, held in high estimation ; the cause does not appear to have been entirely of a religious nature. Kempfer says it was owing to one of their kings having been born under the sign of the dog.

SECOND.

The second impression of the Divine Foot may be seen, say the Siamese, on the *Sūwanna Cappahate*, or "Golden Mountain."

THIRD.

Sūwanna Kúta.

This is said to be the celebrated print of the Divine Foot on Adam's Peak, in Ceylon ; an account of which may be seen in Captain Wilford's paper in the Asiatic Researches, vol. 10. In the *Ratana Kalapa* it is stated, that the *Soowanna Kúta*, or Adam's Peak, retained this name in KONAGAMANA's time. In the period before him, which was that of KAKOOSUNDHA, Adam's Peak was called *Deva Kuta* ; and in KASSIYAPA's time, *Subbha Kuta*.

Lieutenant-Colonel Francklin notices †, that the impression of BUDDHA's foot, on Adam's Peak, has been acknowledged by his followers for a period of thirty centuries ; the peak being termed *Samanella* : the impression is called *Sri Padam* like the *Paduka* near *Bhagalpur*.

* In the *Ratana Kalapa*, a Bali work.

† Researches on the Tenets, &c. of the Jeynes and Budhists, p. 181.

Very opposite origins have been assigned to this impression. The Singhalese, according to Captain Mahony, affirm that after BUDDHA returned for the third time to Ceylon, fifteen years subsequent to his first arrival, he visited sixteen different places in a minute ; and placing his foot on the *Sammanela Sri Pada*, from thence ascended to heaven. The number of journeys here noted agrees nearly with the account before given. But it would appear from the manner in which they are thus hurried over, and from information furnished to us by various papers in the Asiatic Researches, that the Singhalese priests are either more ignorant of the Bali language than the *Chauku*, or priests of Siam, or have got records of a less authentic description. I incline to the former supposition, having received much curious information from a Singhalese priest, who was versed in Bali lore.

FOURTH.

Although the Fourth *Prapatho*, or *Phrabát*, is said to be extant in the country called *Nakhapuri* (*némathaya rattin*) ; which some Siamese, ridiculously enough, suppose to mean *Wot* or *Yo-un*, or Cochin China ; and others, more consistently, assign it to the banks of the Jumna, or *Yamana Nathi*, as they term it.

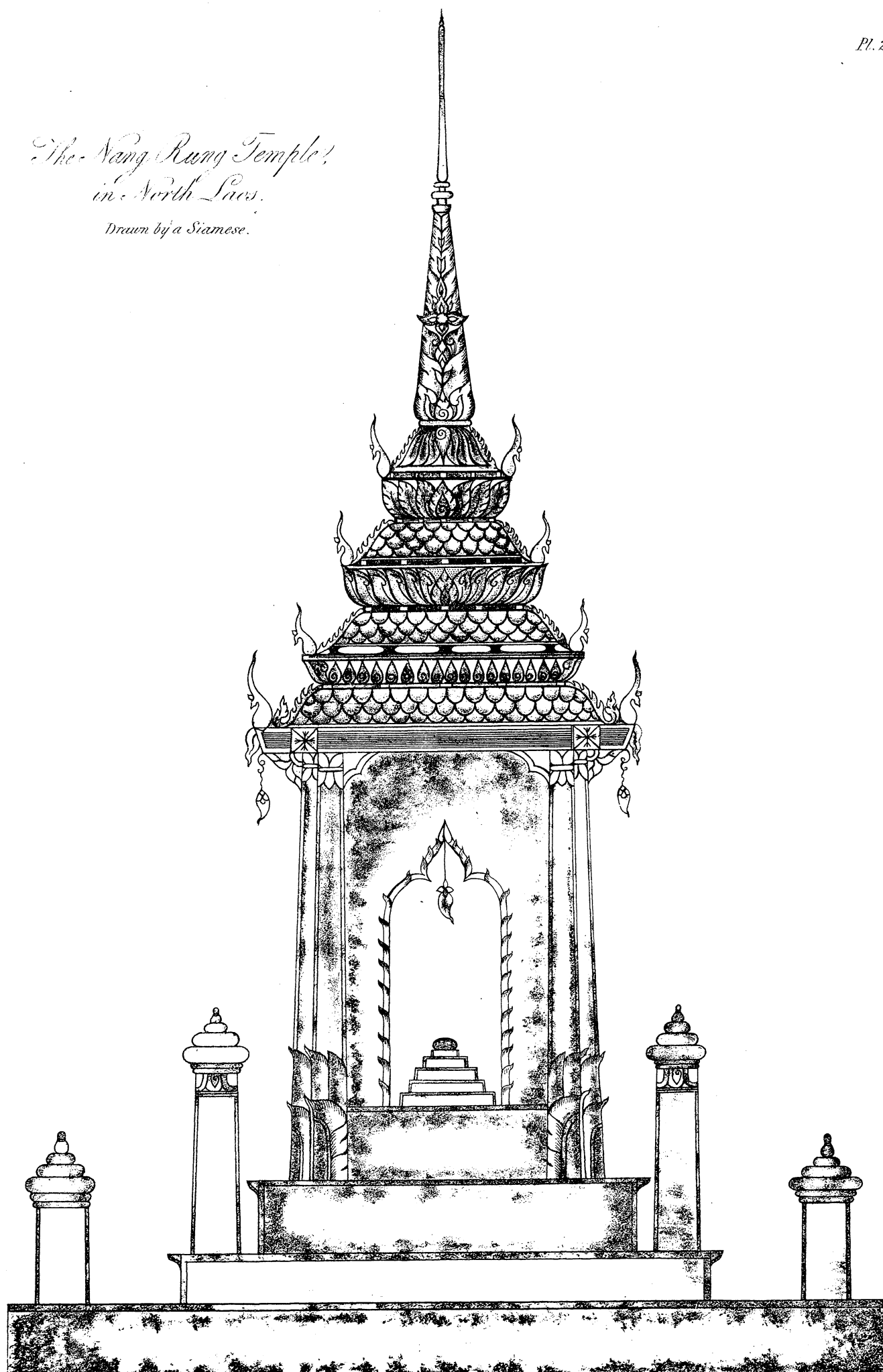
Nakhapuri, or *Nagapuri*, is also the country of the *Nagas*, or snakes. Lieutenant-Colonel Francklin, in his account of the Jainas, alludes to the *Vasa Padukas*, or sacred feet, to be seen in the Jain temple at *Champanagar*.

The most intelligent amongst their priests consulted by me, directly affirmed that the impression is, in their belief, to be seen in the country in which the hill *Khau Nang Rung* is situated ; and on or near which there are four celebrated footsteps. But it is requisite to state that the Siamese are very ignorant of the geography of Hindostan. The following description of *Nang Rung* was given to me by an intelligent and communicative Siamese traveller, who some years ago had gone to that place in the suite of the heir-apparent of *Che-ung-mai*, in Laos, whose ostensible object was to search for gold ; but in which however he was not successful.*

* The Siamese, independent of their belief, in common with all Asiatics, in the possibility of transmuting various substances into gold, are also attached to the quixotic search for it over distant regions.

*The Nang Rung Temple,
in North Laos.*

Drawn by a Siamese.



This traveller told me that *Nang Rung* lies about fifteen days' march, on an elephant, north-west of *Che-ung-mai*; and that such is the scantiness of the population on the route, that pilgrims find it requisite to take provisions with them for the whole journey. Travellers must likewise be well armed against attack or surprise by Burman freebooters.

The heir-apparent alluded to went to pay a devotional visit to the holy *Phrabát*, which is visited by devotees from the most distant provinces of Siam, Laos, and Ava, as is the famous *Dagun* pagoda at Rangún.

Nang Rung, he said, lies in the midst of an extensive and deep forest, which spreads over broken ranges of hills. The *Phrabát* stands upon a raised terrace, like those on which most of their temples are built. The pyramidal building, *Maratapa*, or *Maradop*, which is built over it, consists of hewn stone, and is judged to be sixty *wád*, or ninety feet high.

In order to obtain a more correct idea of the superstructure, my informant, who was a tolerable draftsman, gave me a drawing of it, a copy of which is here appended;* but the accuracy of which I cannot vouch for.

This *Phrabát* is a compound one, each impression rising above the other; so that any hieroglyphics it may contain are only visible in the uppermost one. There are four of these, corresponding to the four descents of the deity.

Dr. Leyden, without specifying the place, has remarked generally, that "it is in the country of the *Laiú* that all the celebrated founders of the religion of BUDDHA are reported to have left their most remarkable vestiges. These traces of the sacred foot are sparingly scattered over Pegu, Ava, and Arracan. But it is among the *Laiú* that they are concentrated; whither devotees repair to worship at the sacred steps of *Prá Kukuson*, *Prá Kounakon*, *Prá Putthakatsop*, and *Prá Samutacadam*."

FIFTH.

The fifth impression of the Divine Foot is supposed to have been left on the banks of the *Nimma thaya Nathica*, the Siamese *Yamana Nathí*, or River *Jumna*. This river, in the Bali, is said to spring from the silver hill of *Hemdwa*, or the *Hímalaya*.

In the first volume of the Asiatic Researches, Mr. Wilmot has recorded an inscription copied by him from the remains of a temple, part of which runs thus: "The Divine Foot of VISHNU was set up by AMARA, the Illustrious, in this place, celebrated by the name of *Buddha Gaya*."

* Plate II.

At Gangautri, on the banks of the Ganges, is a wooden temple, containing a footstep of GANGA on a black stone.* Colonel Symes has exhibited in his "*Embassy to Ava*" a drawing of a *Phrabát*, which he saw in that country near Prome: and adds, that another was to be seen on a large rock lying amidst the hills, one day's journey west of *Menibu*. The former, he observes, was explained to him as a type of the creation.

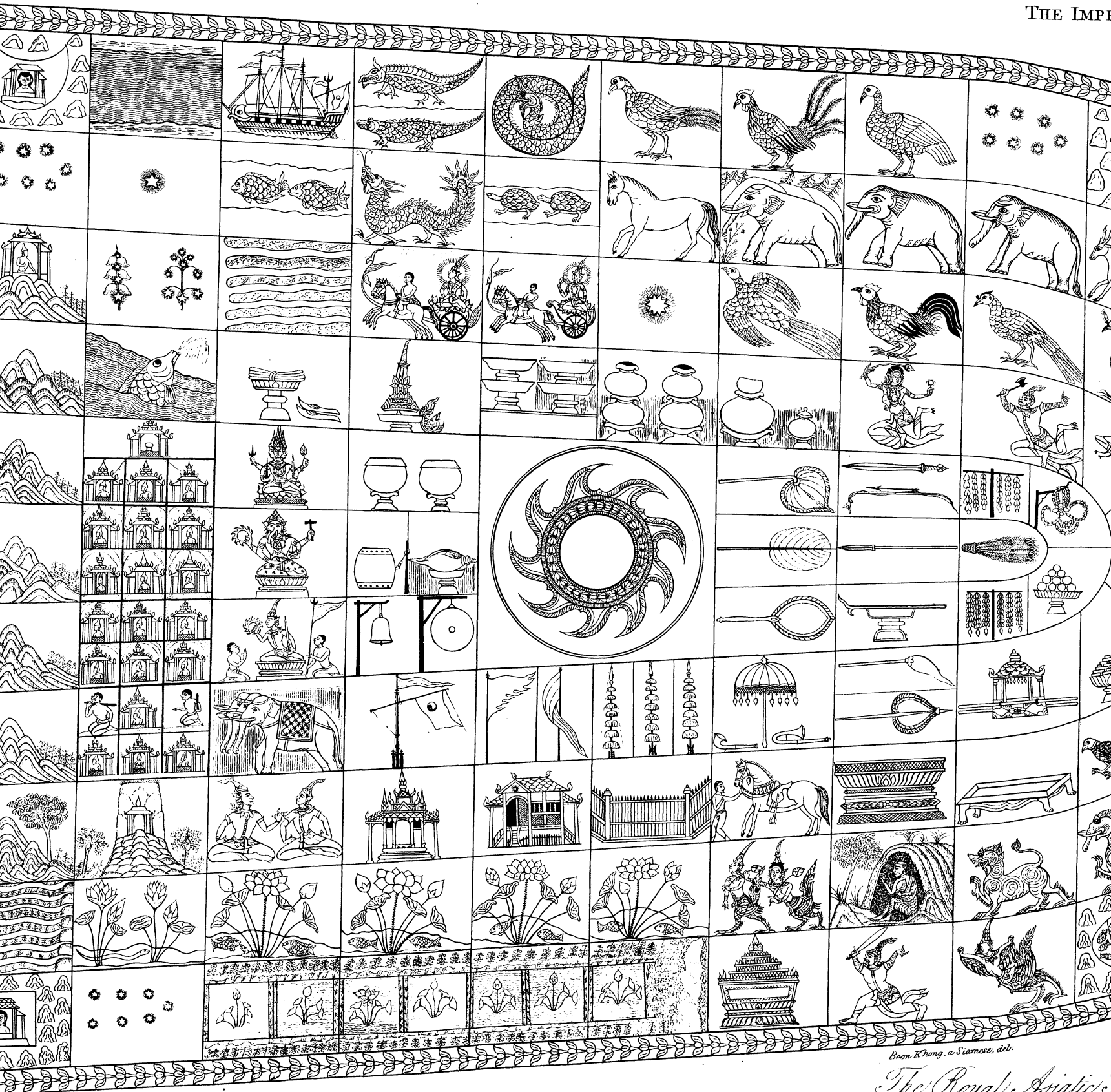
It is to be imagined that the Buddhist priests would not omit the favourable opportunities, which the great veneration paid by the people to their *Phrabáts* affords, to increase their number. Copies are kept in the temples, and attract nearly equal regard with the supposed originals. There is a very distinct one at a *Vát*, or temple, to the north of Tavoy, on the Tenasserim coast, a copy of which was made for me while there.

Those native painters, who are ambitious of distinction, sometimes present to the King of Siam a copy of a *Phrabát*. One of these was presented to me by a Siamese, being in his opinion one of the strongest evidences he could give of a desire to serve me. Being anxious to find out whether the drawing was correct, and consistent with Buddhist principles, it was afterwards shewn to several priests, who were not aware of the source whence it had been obtained: and, as the surest proof of its genuineness, they regarded it with as much respect as if it had been a real divine foot. Not, however, satisfied with this circumstance, I requested them to produce any authority in their possession, shewing that the drawing before them exhibited an object or objects which their faith enjoined them to hold in reverence. They immediately referred to the Bali works, termed by them *Lai Lák Phrabát*, and *Manowatt,ha Sutta*; from which have been extracted the passages explanatory of the *Prá Pat,ha*, or Holy Foot. The Siamese version of this first chapter or book is termed *Camp,hé Lai Lák*, which, however, differs in a slight degree from the original; for it describes the emblems on a right and left *Phrabát*, while the Bali admits only one, at least as far as yet appears.

The list of the symbolical allusions is recited by the priests in their temples, and forms an essential portion of their ritual. It consists of fifty measured lines, of eight syllables each; and contains the names of one hundred and eight objects or things.

The Siamese, in their version, have added a few more symbols appertaining to Hindú mythology; and it concludes with the remark, that one hun-

* Asiatic Researches, vol. xii. p. 283.



Boon Khong, a Siamese, del.

The Royal Asiatic Society
This Drawing of
by the

dred and eight nations offer up fervent prayers at the holy spots where BUDDHA has left impressions of his feet.

As no explanation has, to my knowledge, ever been given of a *Phrabát*, and as the subject is curious in itself, and has reference to the prevailing religions in very remote eras, the lover of oriental antiquities will not, perhaps, be displeased at an attempt towards a farther elucidation of it. It will also enable me to epitomize and expose at once to view many appendages to the Buddhist system of religion, which, although with them apocryphal and strictly Hindú, yet coming before them wrapped in the venerable Bali, claim their peculiar respect and veneration.

The *Phrabáts* in Burman pagodas nearly agree with those in Siamese ones; but the order of the symbol rarely corresponds in any two of them. The Tavoy *Phrabát* is engraved on a large slab of stone, and being of no antiquity is very distinct. The compartments are fewer, and the subjects scantier, than in the drawing here produced.* It need not therefore be described.

In the drawing of the figures, which appear on a slab of marble in a modern Jain temple at Sirohi (as described and illustrated by Lieut.-Col. Francklin), may be recognized several of the emblems impressed on a *Phrabát*. The following are distinctly to be traced, viz. the Lion, the Elephant, the Sun and Moon in their cars, drawn by oxen instead of horses, as in a *Phrabát*; the Horse, the Vase, GÁNES'A, the Serpent, the spiral Building, and tiers of *Devatas*; the Tree, the Six Spheres, the Five Lakes, and the Altar.

Explanation of the Symbols on a Prá Pat,ha, or Impression of the Divine Foot.

No. 1.

Chakkráné, which term implies the two *Chakkras*. In the Siamese book *Lai Lák*, the worshipper is directed to lift his folded hands before his face, and audibly to recite the sacred emblems, beginning thus: "Here is the *Krong Chák*, with its sharp spikes, and gloriously resplendent."

It is further described in the *Chakkasot*. This emblem, it is well known, is familiar to the Brahmans as the discus of the gods, used by them in their wars, and by such happy mortals as by an unwearied pursuit of virtue have attained to that holy state termed in the Bali *éthi watto*.

* Plate III.

This discus, at the will of its possessor (for the pretended power acquired by the performance of austerities is not always employed to the best of purposes), whirls through the air to distant regions, striking kings from their thrones, and discomfiting enemies; and then returns to the hand from which it was launched.

The *Chakkra* is one of the instruments with which *Mettawént,hu* tortures the damned in *Ndraka*, or the Siamese *Norok*; on whose heads it twirls like a fiery whirlwind, with inconceivable velocity.

According to some authorities the Hindú *Chakkra* was a circular mass of fire, instinct with life, darting forth flames on every side;* and thence some have inferred that the Hindús were acquainted with a species of fire, or *agni astri*, which they turned to the purposes of war. The *Chakkra* was borne by VISHNU, and was termed *Sudhárasan*;† and the *Sacti Vishnavi* bore in his hand a conch, a discus or *Chakkra*, a club, a bow, and a sword;‡ and CRISHNA, by striking with the *Chakkra* the mountain in *Saverna Bhúmé*, or the “Land of Gold,” opened a passage into the *Tamomayi Maha Bhumi*, or “Land of Darkness.”§ Sir W. Jones remarked that the Indian Pluto bears in his hands the radiated elliptical weapon, the mace for war, and the lotus; and that the *Avatars* of VISHNU are sometimes depicted accompanied by a flower and the above weapons. According to Mallet, as cited by Maurice, the Scandinavian Jove seems to have been armed with the *Chakkra* of VISHNU, and also bore in his hands the *Padma* and *Geda*.||

From Kempfer’s instructive History of Japan, it appears that the *Chakkra* is also a distinguishing emblem amongst the mountain priests of that country: and we can scarcely doubt that it was among the Druids of Britain considered as the type of eternity. Their attachment to the circle is sufficiently disclosed in the remains of their holy places and groves; and the emblem itself was found on gold coins, discovered in the year 1789 in the middle of the ridge of Carnebrehill, in Cornwall.¶

As a type of eternity, BRAHMÁ is also exhibited to us with the *Chakkra* in one hand, which, perhaps, was originally intended to typify the sun.

* Wilkins’s Bhagavat.

† Maurice’s Indian Antiquities.

‡ Asiatic Researches, vol. viii.

§ Ibid.

|| In the *Ratana Kalapa* the *Chakkra*, there termed *Wajéra Áúd,ha*, is described as one of the missile weapons of India.

¶ Maurice.

In the *Milinda*, the Bali work already quoted, this *Chakkra* is described as one of the seven precious things procured from the *Mahá Samudho*, or the great ocean, and is typical of universal domination.

It is stated in the eighth volume of the Asiatic Researches, that VISHNU, at the request of the *Devatas*, cut the body of SUTI with his *Chakkra* into fifty-one pieces, which were scattered over the earth; and that each place, where a piece was left, became one where the *Linga* was afterwards worshipped.

We do not find on the *Phrabát* any very decided *Phallic* symbol; but there are several which indirectly allude to it: the ship and mast are amongst these. Captain Sykes* informs us, "that the Buddhist temples examined by him contain enormous hemispherical emblems, which may be compared with the *Ling*." The small conical pyramids of earth which the Siamese erect in the fifth month of their year, distinctly refer to the *Phallic* worship. Mr. Colebrooke observes, that the worship of the *Linga* and VISHNU originated at a period when the Buddhist religion was flourishing, and thence may be inferred the little respect the Buddhists pay to that deity.

No. 2.

Unahít Sangcha. The Siamese call this the *Mongkut*, or tiara of BUDDHA, or *P. It is peaked, or pyramidal; being, no doubt, emblematical of the solar ray.*

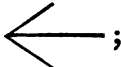



We learn from Mr. Maurice that the same shape was retained in the Persian tiara, and the *Phrygian* bonnet of MITHRA: and he also asserts, that a similar one was worn by the Druids "of the sect of the elder BUDH, ODEN, or WODEN."

The Siamese priests go close shaved, and wear no covering on the head. The *Mongkut* is worn by their actors in theatrical exhibitions, when it is their province to display in mimicry the action of heroes and demi-gods.


No. 3.

Bát keo ínt,hanán, or the vase, or jar, used by Siamese priests to hold the provisions which they collect in their daily rounds. I believe the *Kéo ínt,hanán* is the amethyst.

* Bombay Literary Transactions, vol. iii. p. 310.

A jar is the characteristic mark of MÁLI, the nineteenth *Jaina* god, or deified saint; as cited from native authorities by Mr. Colebrooke, in his learned observations on the *Jainas*. The *Sacti* followers, according to Mr. Patterson,* designate the jar *Cumbh*, *G'hata*, (which, in the Hindu zodiac, is the name of the sign Aquarius), by this mark, ; the *Vaishnavas* by this, ; and the *Saivas* by this, : the female principles, or *Sacti*, by this 

The Siamese Aquarius is *Rahu*, and his sign is a double triangle. This last mark is called *Tá lu phet* by the Siamese, and occurs frequently on their standards.

The vase is an emblem of the five elements. The priests of Egypt carried the sacred vase in their processions; and it was carried with great pomp at the consecration of a Buddhist temple, in which instance it contained the venom of snakes, to be used as a charm against the malignant spirits which were supposed ready to destroy the newly-erected edifice. The vase appears on a sculptured slate in the wall of a modern temple at Sirohee. (*Vide* Plate in Lieut.-Colonel Francklin's account of the Jeynes and Buddhists.) The triangle is symbolical of VISHNU and PRITHIVI, and of the *Parcæ*, or Energies, three in one; *Tricala*, *Devi*, *Eumara* (Vesta, Minerva, and Morta). They sit in a triangle, on *Tricúta*, in the infernal regions, according to THESPESIUS;† and the double triangle  represents their powers combined. Perhaps this vase represents that which was used to contain the goddess LACSHMI when brought down from heaven by powerful spells.

No. 4.

Bunnang; or, according to the Siamese, *Khont,ho*. It represents a water jar, which BUDDHA is supposed to have had when he was *Phrá Sidhatta*, before attaining to *Niván*.

Perhaps either this, or the foregoing emblem, refers to the hallowed vase from which (according to Maurice) NOAH poured out libations of generous wine; or to the vase of HERCULES, by some supposed to allude to the compass: because HERCULES is imagined to have travelled towards every

* Asiatic Researches, vol. viii. p. 77.

† Ibid. vol. xi. p. 113.

point of it. By others it is thought to point out the golden ship. The sacred vase was, as before noticed, carried in Egyptian processions. It was in form of a pap-boat, and contained the milk of the *Dea Multimamma*.

No. 5.

Talapat nang. The Siamese *Tarapát bai tan*, or *Talapat*. This is the fan which Siamese priests carry about instead of an umbrella, to protect them from the sun, and drive off insects. From the Siamese name implying that it is made of the leaf of the *Tala* palm, or *Tanot*, has arisen the absurd appellation of *Talapoins*, bestowed on the Buddhist priests of Siam by Europeans.

No. 6.

Passato. In Siamese *Prasdt*. The ritual or formula before referred to reads thus : “ Here is the palace in form of a square, with every exquisite embellishment, and surmounted by spiral roofs.”

The Siamese say it ought to have seven stories ; perhaps the drawing is incorrect in this instance.

The king of Siam affects the number of seven stories in the construction of his palace ; but these are not directly above each other ; they rather recede from each other, arising as they retreat ; and the roof of each projects over the one immediately preceding it. Thus writes La Loubère : “ They all join to one another, and the whole is from end to end on a line ; a lower roof seems to come out from a higher roof, and the highest to bear on the lowest, like the front bow of one saddle resting upon the hinder bow of another.” The entrances to the *Dágrín* pagoda, at Rangoon, are good examples of this.

The *Passato* seems to allude to the palace of INDRA.

No. 7.

The *Taubai lakchai* of the Siamese, or the royal standard, is another emblem on the *Phrabát* ; and is typical of the seven stages, by some Buddhist sects ascribed to Mount *Meru*.

No. 8.

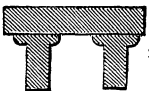
Tré and *Sang*. These are trumpets, by which kings of old were wont to be announced ; and which practice still obtains in India, China, and other Asiatic states. INDRA descends occasionally, according to Indian lore, attended by millions of *Devas* blowing trumpets.

No. 9.

Pí thákang. The Siamese term is *Tiung t'háng*, or the golden bed. Every thing holy or magnificent is with them, as with the Burmese, "golden."

No. 10.

Banlangko. The Siamese *T'hen ban lang*; which they say was the stone-couch or seat of BUDDHA. I apprehend that it is intended to exhibit the stone altar which is sacred to BUDDHA throughout India. It is found in the areas of Siamese temples; and on it are now offered up flowers and fruits, instead of the bloody victims with whose gore it was stained in former ages. It is a permanent memorial of the beneficent purpose for which BUDDHA is supposed to have vested himself in an earthly shape: and if he had done nothing more than overturn the altars of a gloomy and sanguinary priesthood, he would have been, by that act alone, entitled to be embalmed in the grateful recollection of an improved posterity. But the altar is a symbol of the highest antiquity: and the *Ara* of the west may have derived its origin from some scanty tradition of the great patriarchal sacrifice, so miraculously arrested by the Divine arm.

The symbol of Mercury, according to Maurice, is composed of three stones, placed thus , corresponding in some measure with the

Cromlech of Europe, as described by various writers. Those who have travelled in India must have observed three stones thus disposed in many places, particularly along the highways. The next stage shows four supporters to four stone beams.

Stone altars were frequent in England in former times; and on them the Druids performed their abominable sacrifices.

The rock of the Sun exists in Ireland; and rocks of a peculiar shape have been venerated all over the world.

In the heaven of INDRA, according to the *Bali Milinda*, there is the stone altar, which is placed below the tree called *Parikachuta*.

The Chinese have also their altars: and, in fact, they must have been necessary appendages to the pomp of all oblationary religions. Altars were originally placed on high hills, that they might be nearer to the deity. NOAH built an altar; and after him ABRAHAM, when called to prove his faith by the sacrifice of his son.

No. 11.

Dhá Chang. The Siamese *T'hong Chai*, or flag.

No. 12.

Pato. In Siamese, *T'hong Thadat*, the paper ensign.

No. 13.

Khán hán ola. The royal palankeen, or covered litter.

No. 14.

In Siamese, *T'hat t'hang*, or *Chat thong*, a sort of salver.

No. 15.

Wúchaní. In Siamese, *P'hatchaní*, a large fan, which kings only are privileged to have near them.

No. 16.

Síneru, or *Meru*.* The *Meru Rāt* and *Khaú pramen* of the Siamese. That the Sanscrit scholar may have an opportunity of comparing the Bali accounts of this celebrated mountain with those given by the Hindus, I shall here endeavour to describe it from them as summarily as the subject will admit.

The Siamese say that *Meru* rests on three groups of hills, disposed like the supporters of an earthen fire-place.†

The Burmese, agreeably to Sangermano's account, cited by Dr. Buchanan, say that *Mienmo* or *Meru* rests on four feet of carbuncle. Wilford informs us that the followers of BUDDHA, in Thibet, place the Garden of Eden at the foot of *Meru*, and toward the south-west, at the source of the Ganges. *Meru* was also the seat of the rulers of the earth.

The earth, according to the Bali, from which the Siamese notions of it are taken, rests on water, the water on air; and beneath is a vacuum. And

* *Meru* was the seat of the ruler of the world (Asiatic Researches, Vol. v.); consequently INDRA was king of some powerful empire. It is also supposed to have been a mountain near the city of *Naishada*, or *Nysa*, or *Dionessopolis* (Ibid.); and again, *Meru* is supposed to have stood in latitude 45°, in Tartary. (Vide ibid.)

† In the third volume of the *Milinda Raja*, already quoted, it is stated that the earth is suspended like water in the inside of an exhausted receiver, *dhamma karka*.

the *Meru* of orthodox Hindus, with its three peaks and its seven steps, seems to compose the whole world. The supporters of the *Meru* of the Siamese may be the *Tricúta* of the Hindus. Maurice supposed that the seven ranges of hills were the seven purifying spheres, the sidereal ladder, and the seven gates of scripture.

The Hindu *Meru* is conical ; that of the Siamese, as well as that of the Buddhists in general, is of a shape more or less square, compared by Wilford to the Tower of Babel. This was of a square form, and had seven stages like *Meru*, according to the Asiatic Researches.* It is the type of the *Linga*, the Earth, the *Yoni*, and the *Lotos*.† The Buddhists of India make *Meru* to have eight steps ; and while the Siamese place *Jambu Dwipa*, or the habitable part of the world, outside of *Meru*, the Indian Buddhists place it inside. The Siamese consider it as the world we inhabit.

Jambu signifies India also ; and is stated by the authority, above quoted, to be the *Sabha* of the *Puranas*, or the place where the principal *Dévatás* are supposed to reside.

According to the *Milinda*, the Bali compendium of Buddhist learning, the world, in the centre of which is *Meru*, is in length and breadth, each, 1,203,450 *yojana* ; and its circumference is thrice that number.

There is here an approach to the relative proportion betwixt the diameter and circumference. It is evident from the work in question, that the earth was considered a round body. But a Buddhist priest of Ceylon, whom I tried to convince of this fact, strenuously opposed it ; although, otherwise learned in his own peculiar system.‡

* Vol. viii. p. 260.

† Asiatic Researches, vol. viii. p. 260.

‡ The earth is stated to be, in thickness	.. ..	240,000	yojana.
The water under it	.. ..	480,000	ditto.
The air below that	.. ..	960,000	ditto.
<i>Sumeru</i> or <i>Meru</i> is, in height	.. ..	84,000	ditto.
1st. <i>Yokhunnhara</i> , the first hill, is in height	.. ..	42,000	ditto.
2d. <i>Isint'hara</i> , the second ditto, ditto	.. ..	21,000	ditto.
3d. <i>Karawéka</i>	.. ..	10,500	ditto.
4th. The hill <i>Sudhatsana</i>	.. ..	5,250	ditto.
5th. Ditto <i>Nímékhara</i>	.. ..	2,625	ditto.
6th. Ditto <i>Wímantaka</i>	.. ..	1,312	ditto.
7th. Ditto <i>Atsakána</i>	.. ..	656	ditto.

The ranges of *Meru* have been supposed to represent parallels of latitude ; and hence the *Jainas* make the outermost largest.

No. 17.

In the drawing of the *Phrabát* will be found the *Satt,ha Maha K,hangka*, the seven great rivers, the Siamese *Ménam Yai Chet*, which lie betwixt the seven ranges of hills above described. These rivers correspond in width to that of each range nearest to them on the *Meru* side. Sangermano's account is incorrect, in making the first range 84,000 *yojana* high. This number belongs to the great central mountain.

Around this fabled mountain, and in the direction of the four cardinal points, are the four *Dwipas*, to be noticed hereafter. Above are the abodes of the blessed, crowned by the indefinable mansions of the *Loka*: around the upper part of *Meru*, the sun, moon, and planets perform their revolutions. INDRA occupies the summit, with his bright palaces and city, and host of *Dévatás*. Below the foundation of *Méru*, and underneath the waters, is the kingdom of the mighty NAGA, or king of snakes, on whose right hand sits K,HANGK,HA NARÍ, the goddess of waters; and on his left, BHUMMÉ NÁRI, the goddess of earth: lastly, beneath all, is *Naraka*, or hell.

With all these we must proceed in their order.

No. 18.

First, *Cha Kama Wachara*. The first six mansions, including the habitations of mortals. Leaving the latter for the present, we proceed to the description of the twenty-two superior mansions, with their inhabitants.

First, *Chatu Máha Rachéka*. To each of the descriptions in the Bali of these heavens is added the following sentence, intended to be used as a sort of chorus: "*T,hewa satt,ha manutsa wesong. T,hewanang satt,hang suttana.*"

In this heaven the spirits or *dewatas* live or remain 500 years. They visit their consorts 9,000,000 times, obeying the same laws of generation as mankind.*

The Siamese, as well as the Burmese,† suppose that the sun, moon, and stars revolve round *Meru* in circles, the planes of which are parallel to the earth, or form angles with it. The stars, they imagine, to be constant in their motions, while the sun and moon have a declination; that the sun goes from north to south, and in the contrary direction back, from south to

* But (as Dr. Buchanan has observed, citing Sangermano's translation respecting the Burman *Zadumaharít*), with this exception, that *in coitu non semen, sed solum æra vel ventum emittunt*.

† Vide Sangermano's account given by Dr. Buchanan. Asiatic Researches, vol. vi.

north, always touching the twelve constellations, returning in one year to the place whence he set out. The moon, the Burmese say, performs her revolution in one month.

The Siamese assign the following proportions to the sun, moon, and planets, *viz.* the sun, fifty *yojana* in diameter; the moon, forty-nine; Mars, fifteen; Mercury, thirteen; Jupiter, thirty-seven; Venus, nineteen; and Saturn, thirteen.

Secondly, The heaven of INDRA, *Tawatingsa*; where the *Devatas* live to the age of 1,000 years, and they perform conjugal rites 346,000,000 of times. They follow mankind in their mode of generation.

The following account of INDRA's heaven has been extracted from the *Milinda*:

“ From the habitations of men to this heaven is 680,000 *yojanas*.

“ His city, gloriously bright, is inclosed by a wall 10,000 *yojanas* in circuit. It has 1,000 gates. Within is his palace, magnificently studded with seven kinds of precious stones. The height of this palace is 1,000 *yojanas*. There is a splendid hall or building within the walls, where the happy inhabitants chaunt melodious hymns. It is 300 *yojanas* on every side.

“ The mighty wide-spreading *Parékachata*, or ‘tree of Indra,’ is situated in the northern quarter of these regions. Its stem is fifteen *yojanas* in circumference; its height, from the root to the branch, fifty *yojanas*. The length of the branches 100. The height from the lowest to the highest branch 100 *yojanas*; the circuit of the branches and foliage 3,000 *yojanas*.

“ The seat of INDRA is placed below this umbrageous tree. It is sixty *yojanas* in length; in breadth fifty, and in thickness fifteen. He has also at his command a flaming car, which is 150 *yojanas* in length. The body, or seat, is one *yojana* high, and the canopy over that three *yojanas*. The streamer, at the extremity of the pole, is 250 *yojanas* long.”

The animals which draw this chariot are not specified, as far as I have been able to learn; but Sangermano's account makes it to be dragged by 2,000 horses.

The elephant of INDRA, *Erawauno*, is in height 150 *yojanas*; but the Burmese and Siamese differ somewhat in their account of this elephant.

INDRA, like all the other deities, had a human origin. In the same Bali work his titles are thus enumerated:

1st. *Maghawa*, which appertained to him while yet a holy personage on the earth.

2d. *Búrient hat ho*, when he was in the full exercise of the virtues of charity and benevolence.

3d. *Sak ko*, which relates to his tender and benign disposition.

4th. *P halawo*, when he built houses for the poor, and was otherwise munificent.

5th. *Sahatsa netto*, when he had acquired a perfect knowledge of 1,000 Bali works. In the original this properly signifies the sacred language.

6th. *Súchampaté*, when he was married to SUCHÉDA NÁRÍ.

7th. *T hewána mint ho*, when, having finished his active and virtuous period on earth, he ascended to *Tawatingsanang*, and became the ruler of all the *Devatas* of that bright abode.

In the *Ratana Kalapa* his age is given at one *Kalpa* and a half. He wears a *Níla Maní*, or jewel, in his crown : and is armed with the *Wajíra Apud ha*, or “Diamond *Chakkra*.” In his domain is a temple called *Upachara*, the dimensions of which are as follow, viz.

1. The <i>Chaitya</i>	...	...	...	8 cubits high.
2. <i>Maha Bodí</i>	...	...	...	6 ditto.
3. <i>Patimar d hatu</i>	...	...	...	12 ditto.
4. <i>Sema Sang hang</i>	...	...	...	4 ditto.
5. <i>Uposat ha</i>	...	...	...	11 ditto.
6. <i>Chaitya Budd ha d hatu</i> , or relic repository	...	...	...	16 ditto.

It does not appear that he was translated alive to heaven ; but from another part of the *Milinda* I extract the following notice of four persons who were translated to heaven, without tasting death :

1st. *Tuttila K hdnt happo*.

2d. *Sat héna Raja*.

3d. *Nemí Raja*, who is one of the princes in the genealogy of the ten minor incarnations of the fourth BUDDHA.

4th. *Mant hatu Raja*.

We find, in the Asiatic Researches, that the Hindus affirm that seven persons were thus translated to heaven. CORNELIUS, a Lipede, places ENOCH in the *Súrga B humal*, along with nine other persons who were translated alive. The LUBDHACA of the Brahmans was transferred to the starry sphere, and became regent of Sirius ; and DRUVA was also taken up to the skies, where he shines in the polar star.

INDRA or ENTRA, as the Siamese write the word, had four consorts while on earth :

1st. SUCHÉDA, whose delight consisted in encouraging horticulture.

2d. SANANTHA, who was famed for the wells and reservoirs dug by her orders.

3d. SUTHAMMA, whose pleasure consisted in building caravansaries and other houses for the reception of pilgrims and travellers.

4th. SUCHADA, whose piety and virtue gained her immortal honour.

In the *Ratana Kalapa*, a Ceylonese Bali work, the following are given as the names of INDRA's consorts, a goodly haram ; but a translation of which names would, probably, throw light upon the origin, or true meaning of the legend.

1. JOTÍMAKA.	14. PURÍSORAWÍ.	27. SUDHAMA.
2. SITAKAWÍ.	15. SUNDARE.	28. SUBHAJA.
3. SERASA.	16. SUDASÍ.	29. SOMEYAWATÍ.
4. WÍSOGAMO.	17. WÍMALA.	30. UPPALAWANA.
5. SITASÍ.	18. TUBAGATA.	31. GADACHITRA.
6. BHUMMARÍ.	19. JOTÍA KAMA.	32. KAPINA.
7. SURAJA.	20. PANYAWATÍ.	33. URABALÍ.
8. GAUDHAVI.	21. CHANDÍNA.	34. SUMALÍ.
9. KÍNNARAPAKHÍNDÍ.	22. ANOJA.	35. RAJATÍ; together
10. TUMAKHÍ.	23. SUMANA.	with 250,000,000
11. KANAKAWATÍ.	24. SUNANDA.	wives of lesser
12. SASÍ.	25. SUJATA.	note.
13. TIBA.	26. SUCHÍTA.	

Thirdly, *Yama*,* in which the inhabitants live 2,000 years. These do not perform conjugal rites, but simply embrace their wives 144,000,000 times.

Fourthly, *Tusita*. Its inhabitants live 4,000 years. They too do not perform conjugal rites ; but only take their wives by the hand 576,000,000 times.

* *Yama* is also a name of the chief ruler in *Naraka*, or hell ; but BUDDHA, according to the *Ratana Kalapa*, said that " there is no such personage, but that the wicked see him only in their minds."

Fifthly, *Némanaraté*. Its inhabitants live 8,000 years. The husband converses only with his wife 2,304,000,000 times, by which means the race is perpetuated.

Sixthly, *Parané Méttá Sawaté*. The inhabitants here live 16,000 years. They approach their wives 920,000,000 times, and the interchange of glances is sufficient for the perpetuation of the species.*

SOLASA MAHA P,HRÁMA, or the remaining Sixteen Heavens.

Seventh, *Paranamétta wasa wat,teeno*.

Eighth, *B,hráma parí sach,ha*.

Ninth, *B,hráma Parohíta*.

Tenth, *Maha B,hráma*.

Eleventh, *Parítáb,ha*.

Twelfth, *Appamanab,ha*.

Thirteenth, *Ab,hdśára*.

Fourteenth, *Paríta Sub,ha*.

Fifteenth, *Appamana Sub,ha*.

Sixteenth, *Sub,ha Kínhaka*.

Seventeenth, *Wehap,halá*.

Eighteenth, *Awíha*.

Nineteenth, *Attapa*.

Twentieth, *Sut,hasa*.

Twenty-first, *Sut,hasé*.

Twenty-second, *Akanít,haka*.

In this twenty-second and superior heaven is the *Trai Lók* of the Siamese, and the *Saha Lacás* of the Hindus. The elliptical figure, here representing these regions, may remind us of the imagined spherical shape of Jupiter (from which issued a serpent), in the western mythology, and of the Divine Nature, which is without beginning or end: or it may recall to mind the Egyptian *Cnuphis*, whose temple was of an oval shape like that of JAGGER-NATH. Or it may have reference to the famous *mundane egg*, or to the anciently-worshipped, or venerated serpent's egg,† the *ovum anguinum*.

* All these gradations seem only intended to shadow out the abstraction from earthly affections and passions, supposed to accompany the gradual rise of the beings alluded to on the ladder to perfect virtue.

† *Vide* Maurice for these remarks.

Next follows an account of the modes in which the world is destroyed after stated periods or *Kalpas*.

1st. The destruction happens by means of fire. The five first mansions, *i. e.* from *Bhumanang* up to *Némanáraté*, inclusive, are consumed, with all therein.

2d. The next eight mansions, superior to these, are destroyed by a deluge of water.

3d. Furious winds arise and sweep away the nine remaining mansions.*

No. 19.

Chatur Thípa. The four great *Dwípas*, or divisions of the world, here figured by the heads supposed respectively to resemble those of the inhabitants of the *Dwípas*. These are surrounded by the *Maha Samudho*, or great sea.

1st. *Champhu Thípa.* The Hindu *Jambu Dwípa*. Its diameter is 10,000 *yojanas*. It is of a shape resembling the body of a carriage; and its inhabitants retain, in the conformation of their countenances and heads, the same shape. The diameter here is the length of the *Dwípa*; its breadth is 7,000 *yojanas*.

The surface of this region was once overwhelmed with water to the depth of 4,000 *yojanas*. Here we have an acknowledgment of a partial inundation on this earth, and in the region of India; and which might have been owing to some of the great lakes, which we have every reason to believe abounded betwixt India, Tibet, and Tartary, having burst their barriers and deluged the plains. The Siamese are ignorant of NOAH's deluge.

When mankind fell not below four cubits in stature, they lived in *Champhu Thípe*, and their lives extended to 100 years. They subsisted by the sweat of their brows.

In the midst of this region, the *Milnda* informs us, stands a *Pipala* tree, the dimensions of which are as follow: The girth of the trunk is 15 *yojanas*; the height to the first branch, 50; the length of the branches, 100;

* In Dr. Buchanan's account of the Burman religion, we find that Sangermano describes the world as being, out of sixty-four times, destroyed fifty-six times by fire, seven times by water, and once by wind; and Lieut.-Colonel Francklin states, that the Indian Buddhists are taught that there are four superior heavens, which are not destroyed at all, at the end of a *Kalpa*, or given period of time.

from the lowest to the highest branch, 100 ; and the circuit of the branches and foliage, 3,000 *yojanas*.

2. *Ammarakkoyané*. This *Dwípa* is of a circular shape, being 9,000 *yojanas* in diameter. Its inhabitants have faces resembling the full moon.

When this became the habitation of mankind, their stature reached to the great medium of twenty-four cubits, while their lives extended to 600 years. These happy mortals were not forced to till a grudging soil for food, or interest themselves in other occupations ; whatever they desired was that instant presented by invisible agency to their hands.

It contained a tree of similar proportions with that in *Champhu Tíhépé*.

3. *Utaraka'ro*. This northern island is a square of 8,000 *yojanas* every way ; and the features of its inhabitants partake of the same shape.

It contains a tree termed *Kappa Phrék* (the *Thai Kappaphræk*), of similar dimensions to that before described. On it grows, or is hung up, all that is capable of satiating the most voluptuous appetite, or serving every conveniency of man.*

When mankind came to live in this *Dwípa*, their stature exceeded not twenty cubits, nor their lives 500 years ; and they lived on what was produced by the tree alluded to.

4. *Bupphawít'he*. This quarter is 7,000 *yojanas* broad, and is in form of a crescent, or like the moon when seven days old. The inhabitants have crescent-like faces. In the centre of this quarter is another tree, like those already described. Formerly the inhabitants here lived 400 years, and their stature fell to sixteen cubits. They subsisted on the *Akás*, or ether.

Lanca Dwíp is not here alluded to. In the *Bali Milinda Raja*, it is stated that in KAKUSUNDHAS' time (the first of the five BUDDHAS), *Lanca Dwíp* was called *Uja Dwíp*. In KONAGAMANA'S (the second BUDDHA'S) time, it was termed *Wára Dwíp*. In the third BUDDHA, KASSIYAPA'S time, this country was called *Wisalapurá*.

5. The *Eko Rukk'ho*. This tree is placed in the centre of the world. It is, perhaps, the *Kalbirj* of India. It is replete with exquisite fragrance to ravish the senses ; and when stirred by the Zephyr's breath, such har-

* It may be here remarked, that Ireland had its *Calpa Vricsha*, or tree of knowledge and plenty. (a) It is the *Padeza Bayn* of the Burmans, mentioned by Dr. Buchanan.

(a) Asiatic Researches, vol. i. p. 56.

monious sounds are produced, that the gods themselves stoop to listen, forgetting even the delights of *Sawán* (heaven).

The girth of the trunk is fifteen *yojanas*; and the height to the first branch is fifty *yojanas*. It has four branches, directed to the four cardinal points, each being fifty *yojanas* long.

When the fruit depending from the northern branch ripens, it falls into the Northern Ocean, and becomes food for fishes.

When the fruit of the southern branch ripens, and falls to the ground in the regions of *Hemaphanta* (Himalaya), it is turned into silver.

The hill *Hemaphanta* is, in height, 500 *yojanas*; in breadth, 1,000; and in length the same.

When the fruit of the western branch drops off, it becomes gold.

The fruit of the eastern branch is, on falling, changed into diamonds and other gems.

“The mighty *Meru* rests on a foundation 84,000 *yojanas* below the surface of the waters of the great ocean. These waters rest on air.”

From *Meru*, which seems to represent the pole of the earth, to the great *Dwípas*, in the four quarters of the world, the distance is respectively 10,000 *yojanas*; and from these respectively to the lesser surrounding *Dwípas*, 2,000 *yojanas*.

The earth, in another part of the *Milinda*, is thus noticed; and the notice does not much differ from Sangermano's account of the Burman *Cosmographia*:

- “Its diameter 900,000 *yojanas*.
- “Its thickness 240,000 ditto.
- “One half of this is *Síla*, or rock, and
the rest *pat'hawí*, or earth and water.
- “The water, in depth, is 480,000 ditto.
- “The air ... ditto 960,000 ditto.
- “Beneath, all is a vacuum.”

The Burmans say the earth is 1,203,400 *yojanas* in diameter; and its circumference, which is bounded by high mountains, thrice its diameter.

No. 20.

Maha Samut'ho. The great sea already described. *P'HRÁ SAMUT* is the Siamese god of the ocean. *BORUN* is his Hindu title.

No. 21.

T,haráwi Sahatsa Paríwára. These represent the 2,000 lesser *Dwípas*, or islands surrounding the four great *Dwípas*, and are in the proportion of 500 to each of the latter.

No. 22.

Yuk,halang. The Siamese *Plá Tap,he-un t,hdng t,hang K,ho*, or the huge golden fishes which lurk in the ocean betwixt *Meru* and the *Dwípas*, causing whirlpools to boil. Perhaps these allude to the Sanscrit *Sisumára*.

Below *Meru* is the country of the ASSURS, who, according to the Burmans, were cast out of Paradise, or *Tawatíngsa*, by GODAMA. This the Siamese do not assert: they are, however, spirits who rebelled against the gods, and were cast down from heaven. Their country is divided into four quarters, each under the sway of its own prince or king.

The diameter of the whole is 10,000 *yojanas*.

The king of the eastern quarter is called WEPACHUTU ASSURA. P,HALUKA ASSURA reigns in the west; RAHU ASSURUNTHA in the north; and AMP,HARA ASSURA in the south.

In this country of the ASSURS there is also a mighty tree.

The virtuous, according to their degrees of merit, will take precedence in the heavens of the *P,hramma*.

The age of the *P,hramma Paré Sach,ha* is one-third of an *Asangk,haiya Kalpa*.

The *Maha P,hramma* live a complete *Kalpa*.

The *P,hramma Parohata* live half of a perfect *Kalpa*.

There are three *Tatiyaj,hana*:

1st. *Parétab,ha*, who live two *Kalpas* in this heaven.

2d. *Appamanab,ha*, who exist for four *Kalpas* in this state.

3d. *Ab,hassara*, who live eight *Kalpas* in this state.

TATÉYAJ,HANA.

The *Parétab,ha*. The Brahmans here live sixteen *Kalpas*.

The *Appamanasub,ha*. The Brahmans live in this stage thirty-two *Kalpas*.

The *Sub,ha Kénhaka*, where they exist for the immense period of sixty-four *Kalpas*.

There are *Chattu* (or six) *Thachana*.

The Brahmans of *Wehapphala* live 500 *Maha* (or great) *Kalpas*.

Those of *Awicha* ... 1,000 ... ditto.

Those termed *Attapa* ... 2,000 ... ditto.

They of *Sathatsa* ... 4,000 ... ditto.

Of *Sathatsi* ... 8,000 ... ditto.

Of *Akanétpha* ... 16,000 ... ditto.

Here, as in almost every other case, we find the same dull attention to preserve a certain gradation in the numbers.

INFERNAL REGIONS.

It only remains to describe the infernal regions of Siamese mythology, as derived by them from the Bali; and hence we may judge of the checks which the religion of Siam would give to the passions of the multitude, if perfectly operative: it certainly works greatly on their fears. For this purpose I have extracted the following descriptions from the *Milinda*: 1st, Of the *Maha Naraka-atha*, or eight great hells, and the punishments of the wicked in them.

Murderers go into the hell *Sanchirwa*. Five hundred years of mankind are equal to a day and night in the mansion or heaven *Chattu Maha Rachéka*, which lies in the latitude of the constellation of the Alligator; and five hundred years of this heaven are equivalent to a day and night of this hell. When the suffering spirits have endured the torments of this immense period, they return to the earth, and animate the bodies of vile reptiles, or ferocious animals.

Thieves are precipitated into the hell *Kalasutte*. One thousand years of man are equal to one day and night in *Tawatngsa Sárwan* (the heaven of INDRA); and one thousand years in this last form a day and night in the hell *Kalasutte*. When the guilty have been punished for this period, they return to the earth, and animate the bodies of miserable wretches and loathsome animals.

Adulterers pass into the hell called *Sanghatta*, where they remain for two thousand ages. Two thousand earthly years are equal to a day and night in the heaven *Yama*; and two thousand years in *Yama* are equivalent to a day and night in *Sanghatta Naraka*.

Adulterers again ascend to the earth, and animate the bodies of women, to all appearance, but deprived in reality of the sexual distinction.

Liars fall into the hell called *Rorúwa Naraka*, and there are tormented for four thousand *yogas*. Four thousand years of man form a day and night in *Dutsida Savan*; and four thousand years in this last are equivalent to a day and night of *Rorúwa Naraka*.

The guilty soul, when it again visits the earth, becomes a devil, or animal of hideous aspect.

Drunkards and sots are precipitated into the *Maha Rorúwa*, or the great hell.

Eight thousand earthly years equal one day and night in the heaven *Nímanaratté*; while eight thousand of its years are the measure of a day and night in *Maha Rorúwa*.

Khama. Here the guilty remain for sixteen hundred of its years.

Maha (or great) *Khama*, where the wicked dwell one half of a *Kalpa*.

Maha Awéché, where the guilty dwell for the period of one *Kalpa*.

The punishments in all of these hells are proportioned to the crimes of the sinners. There is the *Loha Kúmbhé*, or the *iron cauldron hell*, in which the sinner is boiled. The *Samp,halé*, where there are high trees, on which grow long spikes, and upon which sinners are transfixed; while huge birds gnaw their flesh and tear them with their talons. The *Asítot,haka* and *Asínak,ha*, where are great lakes and reservoirs of freezing water, and fields of inextinguishable fire; and where the guilty are punished by being suddenly transported from one of these to the other.

Tamp,ho t,haka, where there are iron pots with liquid fire; and *Pitsaka Baphata*, where immense grinding stones and hills roll over and crush the wicked.

Asiad,ha Naga, the hell of snakes; *Sunak,ha*, that of dogs.

Yantapatsana, where the damned soul is hurled down from awful heights, and dashed on rocks.

Kusa, where there is fire, from which no flame proceeds.

Ayotuwa. Balls and bars of red-hot iron are here prepared for the guilty to grasp in their hands, and bear on their shoulders.

Each of the eight great hells is surrounded by sixteen lesser ones; and each of these again by forty still smaller ones: making fifty-seven in all for one group. Each group is inclosed by a massive iron wall, nine *yojanas* thick. In this are four gates, one at each face of the square. The whole of the hells, composing one *Maha Naraka*, amount to four hundred and fifty-six. The rulers in hell are in number sixty-four, and they sit in judg-

ment at the *gates*; that is, thirty-two remain on the judgment-seats for six infernal months, when they are relieved by thirty-two others.

From the corners of the iron square extend four lines of hells, joining with the great one. They are,

1st. *Wetaráné Naraka*. In this hell are famous *Lotos* flowers, which swim on the surface of the cold lakes. They are furnished either with sharp spikes to catch the falling sinner, or with downy cups to receive the souls of those who, although sinners, have yet committed more good than bad actions, and are entitled to pardon.

2d. *Asépata Wanaraka*.

3d. *Kokkula*.

4th. *Ut,ha Naraka*.

In certain spaces betwixt these hells lie iron mountains, dazzling and resplendent, but not hot: they are termed *Katiéka banp,hot*. Above the infernal regions is the abode of evil spirits, who often ascend amidst the mountains of *Hémawa*.* This passage points out the site of *Meru*.

In the *Milinda* is given a list of six persons who, on account of their great impiety, were precipitated through the yawning earth into hell:

1st. CHÉNCHA MANA WÍKA; who is described by the Siamese as a princess.

2d. SAPPA P,HUD,HA; who was, the Siamese say, king P,HIMMASAN.

3d. T,HEWAD,HATTA, or DEVADATTHA, brother-in-law of P,HRÁ SÍD,HATTA, king of *Kapilawatt,hu*, who afterwards became SOMONOK,HODOM.

4th. NANT,HAMA NAP,HA. The Siamese NONT,HA-MANOP.

5th. NANT,HA YAK,KHA. The Siamese NANT,HA YÁK.

6th. UT,HAKAMAYA CHARA.

This account is followed by that of six other just persons, *viz.* MALAKARO, EKASATAKO, MALÉKA, MATA K,HOPALA-MANAPP,HA, SUPÉYA-UPALÍKA, BUNAKA T,HASO. Then follows the *Marananímitta*, describing what happens

* This might lead us to suppose that there were two hells, or *Maha Naraka*, below each *Dwípa*. Sangermano's description of the Burman religion, quoted by Dr. Buchanan, very closely agrees with this: and I think they have derived their knowledge from the same source originally, but somewhat more corrupted in its passage to them than towards the Siamese. He has also, no doubt, made his extracts from Burman versions of the sacred text, or his proper names would have retained an orthography more consistent with the Sanscrit. I have not room here to quote any of his translations on this subject. The Burmans and Siamese agree in thinking that "*Sin by its own weight sinks the offender to hell.*"

at the last stage of existence. Visions then rise up before the soul, and former good and bad actions pass in review before it. Dying expressions are then uttered, from which the future abode of the soul can be known : such as whether it is to inhabit an earthly frame, the body of an animal, or to walk a demon or unclean spirit ; or, on the other hand, to soar as a *Devata* into the fields of bliss.

The next head in the *Milinda* is, that on the *Pretta*, or spirits.

A band of these dwell on the outskirts of the country of *Racha K, haha* (*Raja Sahu*) ; and another live in the wide ocean. One half of each of their bodies is under water, their feet touching the bottom ; while the other half is erect above the waves, like the god of the Goths, when fishing up the serpent.

The third kind abide in a submarine palace, called *Wímané Kapret*.

The fourth sort inhabit an island.

The fifth description are *Devatas*, or happy spirits, while the moon is on the increase ; and evil spirits, when she is on the wane.

The sixth sort are devils during the increase, and *Devatas* during the wane.

The seventh sort are happy during the day, and miserable during the night.

Arupa. These reside in the uppermost heavens. They are immaterial, or rather they are oval masses of the most dazzling light.* The first of these are the *Akása nancha Yatana*, who enjoy supreme bliss for the space of 20,000 *Maha Kalpas*. The second, or *Winya Nancha Yatana*, live 40,000 *Maha Kalpas*.

The third, *Alkúni Chanya Yatana*, live 80,000 *Maha Kalpas* ; and the fourth, *Neiva Sanya Nasanya Yatana*, live 84,000.

The Siamese, like the Burmans, have thus three kinds of beings : the material and generating ; the material, who do not procreate by the usual laws ; and the immaterial, who do not generate at all.

In the *Milinda* it is related that, in certain instances, races of men and animals were perpetuated without the sexual intercourse. Thus, there are the *Paté Sont, ha*, viz. *T, haya Sangsatta*, descriptive of a female who bore children by her husband's only touching her hands and flowing hair.

* Colonel Wilford describes the *Merupa*, or *Meropes* of Homer, to be lords of the mountain *Meru*, called *Ila* ; hence ILEYAM, ILIUM. The *Meropes* are immortals, and fight, at each renovation of the world, with the giants for the *Amrit*, or *nectar* of immortality, and for LACSHMÉ, or HELENA, Helen. In *Ila* there is a *Troiám*, or triad, of towers, dedicated to the three great gods.

Chalatahana, descriptive of the wife of a priest who conceived by tasting the water used for his ablutions, ASUCHA PANA, or ISÍ SENGKHA TAPASSA, who was a holy man. It happened that a cow drank of the water in which he had been performing ablutions, or of his urine, and brought forth a monster resembling the *Rishís*, but having a goodly front of horns, and possessing, moreover, the power of doing things unattainable by mankind.

NATEPARA PASANA, SUWANNA SAMA, KONLABANDETA, son of a grandee, left his father's country with his wife PALEKA; and, being a holy person, did not cohabit with her; but as he chafed her body with his hand, agreeably to the desire of INDRA, disguised as a Brahman, she conceived, and brought forth a son, whose name is famous as being one of the states of the *metempsychosis*, through which PHRA PHUTDHA passed previous to his last appearance.

T hatsana; handmaids of a king, who, by merely looking at him, became pregnant.

Satt ha; certain fowls, which, hearing the male crow, had eggs generated within them, which were afterwards hatched without the intervention of the male: also certain *cranes* which heard thunder, and from its effects alone laid eggs, and hatched them.

Kand ha; a cow which scented a bull from afar, and became with calf.

Manútsa. Here follows, in the *Milinda*, an account of mankind, said to be the descendants of the famous MANU, the THAU MANU of the Siamese, who are endowed with reasoning faculties above all animals. He is the SWAYAMBHÍVA of India; the FO-HE of China; the ALORIS of the Chaldeans; and the PROTOGONES of Egypt.

BUDDHA is also by the Hindus supposed to have been the son of ATRI, named ILA, daughter of VAIVASWAT, or MENU.

MANU seems to be a name for ADAM. He is also called KASIYAPA by some, which is the term applied to him by the Hindus, who assert that he was the first of the seven *Rishís*, who sprung from BRAHMA, according to Wilford.* The Siamese say he came from the *Pjrammaloke*, which is the same thing.

His wives, according to the Bali, were ADÍRÍ, the virtuous, and DÍRÍ, the vicious, being, apparently, similar to the ancient good and evil principles of the Persians.

Mankind in the Siamese, as well as the Burman cosmography, become extinct at the destruction of a world. They are reproduced by the

* Asiatic Researches, vol. vi.

descent of certain deities from the abodes of the *T,hewátda*, who are allured from their starry habitations by the sweet scent arising from the crust of the new-born earth.

The *Devatas* are believed to be spirits which have formerly animated mortal frames; and when the periods, during which they have been judged worthy to enjoy bliss in heaven, on account of their virtues, have respectively drawn to a close, they must again return to the earth to undergo probations in new states of existence.*

No. 23.

RAJA NÁGA, or P,HRÍA NÁK, who is the famous king of the snakes ANANTA, whose abode is below this earth, in *Patala*.

According to the Siamese, *Patala* is supposed to lie below the waters, in *Bai-dan*, or *Pandalon*.

We may be assured that the history of the snake kings alludes to an earthly dynasty. In the Bali *Mílinda* there is a race of such kings described. Of these the following seven, owing to their sanctity, are not liable to be pecked up by the great bird GARUDA, or K,HRUT, viz.

1. *Panthara*, or *Banduttara*.
2. *Kumb,halatara*.
3. *T,hat,ha Ratt,ha*.
4. *Sattawé*.
5. *T,hantara Wasí*.
6. *Bapp,hataka*.
7. *Pat,hawítaka*.

* In the Bali works, *Mílinda Raja* and *Ratana Kalapa*, the *Manutsa* are divided into four classes; viz.

1. *Manutsa Merayéka*, who sin by killing living things.
2. *Preta*, who wander about in poverty and distress, like ghosts.
3. *Téra-chana*, who are like beasts, and despise human institutions.
4. *Manussa*, who discriminate betwixt good and evil, and adhere to virtue.

Their ideas, conveyed in the latter work regarding original sin, may be gathered from the following curious passages :

Some mothers go seven months only with child, and they eat acid things : it must be deemed that their children are animated by souls which have escaped from *Naraka*, or hell. Others eat clay, and go eight months with child ; their children get souls from the *Prettas*, or spirits. Some eat leaves, grass, and the like ; they give birth in nine months to children, whose souls are derived from animals. And lastly, many pregnant women eat flesh, and after ten months give birth to children, whose souls are derived from the human species.

These snakes inhabited the regions beyond *Jambu Dwîp* (*Himala*), and they fought with the *Asûrs*, or evil spirits, who defeated them.

The snakes fled to the heaven *Chattu Maha Rachéka*; and here, in the outskirts of the hill *Assakan*, they encountered GARUDA. The Cashmerians, we are told, have an account of about five hundred snakes, or kings we may suppose, of different kinds; besides which there are inferior princes. Such are

P'hothé Mukk'ha.

Ak'hé Mukk'ha.

Lat'ha Mukk'ha.

Kat'ha Mukk'ha, &c.

That these kings of snakes were really princes who formerly governed kingdoms, is probable from many circumstances; and they are supposed by the changes of the *metempsychosis* to have migrated into the bodies of snakes.

The Siamese have a legend respecting the great progenitor of the snake dynasty, extracted, they informed me, from the Bali *Sattawécha*; and which runs thus:

“Every seventh day the mighty RAJA NAGA issues forth from his palace, which lies in the region *Badan*; and, having ascended a high mountain, there pours out his soul in ardent devotion. On one of these excursions he accidentally met with a *T'han Somp'han*, or Brahman, who supposing him to be a mere snake, threw a stone, and hit him on the back.

“RAJA NAGA suppressed his resentment, saying to himself, ‘This wretch deserves that I should kill him by a bite for his audacity; but *he is a priest*, I will therefore overlook his ill-nature.’ RAJA NAGA then rolled away in haste, and, assuming a human shape, he suddenly presented himself before the Brahman, and propounded to him the following question: ‘If any one should harbour an intention to kill another, does he thereby commit sin?’ The Brahman said, ‘I would know whether the intent will be followed by acts.’ RAJA NAGA rejoined, ‘He will first design to kill; but, repenting, will abandon the attempt.’ The Brahman said, ‘He will then be guiltless.’

“The Brahman changed the discourse, and complained of a lumbago. RAJA NAGA gave him some rice of the species *oryza glutiosa*, telling him not to let any one taste of it except himself. The Brahman went home, and gave the rice to a lad to dress. The lad spoiled the rice in cooking it,

and, being afraid of the anger of the Brahman, he ate it up himself, and prepared some common rice in its stead.

“During the next night the youth felt divinely inspired: his senses became quickened, and his understanding expanded; all nature seemed to have a voice; the herbs and flowers of the field, and the shrubs and trees of the forest, uttered intelligible sounds, and disclosed to him the hidden virtues inherent in their several juices. He wrote down all that he heard, and after a time became renowned for his knowledge; and hence mankind have derived all that they know of the healing properties of many species of the vegetable kingdom.”*

We find from Wilford's account, in the tenth volume of the Asiatic Researches, that the *Sacshacas*, a serpent tribe famous in the *Puránas*, have two countenances, which they assume at pleasure; and, in the ninth volume, that a tribe of *Nagas* resided on the banks of the Jumna. *SACYA* is, in the same Researches, represented as *SAKA SALIVAHANA* (an incarnation of the great serpent), whose period dates from the year 79 of Christ, and who is, perhaps, *SESOSTRIS*; and the *BUDDHA*, worshipped by the Siamese, is also, by Bali accounts,† the *Photí d hatta*, or king of snakes in the country of *P haranasí* (Benares), or the sixth minor *Avatar*, or *SRÍ SAKYA MÚNÍ K HODOM*. A serpent is the distinguishing mark of the famous *PARSWANATHA*, cited by Mr. H. T. Colebrooke as the twenty-third deified saint of the *Jainas*, and perhaps the founder of their sect. And Major M'Kenzie has remarked that snakes are pourtrayed above the statues of *JAIN DEO*. I have seen them well depicted on the legs of the colossal statue of the *Jaina* god, or *GUMUT DEO*, as the natives of the place term it, at Ellore, on the Malabar coast. *BUDDHA*, when represented sleeping with serpents around him, is *VISHNU*.‡

Serpents breathing fire guarded the mountain *Meru*. The wisdom or guile, of which the serpent has ever been a type, is thus accounted for in Sanscrit writings:§

“When *GARUDA* stole the *Amrita*, or water of immortality, from *Kailds*, some of it fell from his mouth upon some grass. The serpents licked

* Esculapius, the Grecian god of physic, according to Lieut.-Colonel Francklin, has the emblem of a serpent among his attributes.

† The *Milinda Raja*.

‡ Vol. viii. Asiatic Researches, p. 74.

§ Vide Asiatic Researches.

it up, and have ever since had forked tongues.* The *Seshanāga*, or prince of the serpents, is also said to tenant the southern hemisphere, or nether world.

The serpent was also called the Malignant Serpent; the Evil Genius; the Dragon of the Hesperides, and the Polar Dragon; and AZACHA, the principle of good and evil, was represented by two serpents contending for the mundane egg. The king of the *Assúrs*, in Hindu mythology, was also the prince of the *Nāgās*, or snakes.†

The serpent was, moreover, a symbol of the sun, and of renovescent vigour; and, in the Siamese representations of *Meru*, he is the zone of the world, or the equinoctial belt. On other occasions, when figured swallowing his tail, he is the type of eternity. There was also the SANCHA MUKKHA, who was a serpent king, and whose mouth resembled a shell. Serpents engendered of a woman guarded the *Amrita* at INDRA's palace. LACHSMÍ was another serpent. The *Druids* also had their adder or snake; and the many allusions to serpents in the sacred writings need not here be enlarged upon.

MITHRA has his serpent. OSIRIS is said to have combated with the serpent PYTHON; and CRISHNA, in like manner, with the great snake KÁLI NAGA. Syria had an egg and serpent in its mythology; and Phœnicia had one, which was depicted climbing up trees, and entwining round pillars‡ Greece most probably borrowed from some of these countries the serpent, which, conjoined with a lion, formed the compound symbol of HERCULES.

The CNEPH, or AGATHO DIAMON, or good spirit, has a snake for his emblem.

* In the preface to the *Phrá Patḥama*, the Siamese work already quoted, RAJA NAGA's brother is represented as having secreted the *Maní*, or inestimable jewel. He is followed by a priest of *Lanca* to *Meru*; where, finding him asleep with his mouth wide open, he speedily regains the precious treasure.

The Indian *Parus Nauth*, the deified mortal, has generally five expanded *Jaina* serpents' hoods to point him out.—*Lieut.-Colonel Francklin on Serpent Worship*.

† Asiatic Researches, Maurice, and other writers.

‡ It has also been discovered by Wilson, that in the temple of *Ipsambúl*, in Nubia, the serpent is represented climbing round a tree. And, in a drawing in my possession of the incarnations of BUDDHA, he is portrayed as a snake climbing up a pyramid.

The serpent is found depicted in Javanese temples, according to the late Sir S. Raffles.—*History of Java*.

In the Siamese representations of the ten states of existence of BUDDHA, previous to his last appearance, RAJA NAGA is represented climbing up or twisting round a pyramid of earth, emblematical of SIVA and the *Linga*.

The *King of Snakes* and INDRA are great agents in Siamese mythology ; and also in history, when any great event is to receive the embellishments of fiction. The former is stated, in the Siamese history of Ligor, to have been one of the means of inducing TAMPASUKKARÁT, prince of *Awadí*, to settle and people that country. *Bádan* (*Patala*) is his residence. According to Wilford he lived in *Chaciagiri*. *Naga* signifies either a mountain snake, or an elephant.*

* In Lieut.-Colonel Francklin's interesting researches on the Jeynes and Booddhists, published since the foregoing remarks were written, he has given an interesting account of the *Serpent Worship*. He observes, that it was mixed with the Jewish ordinances ; that the dragon, or great serpent, was worshipped in Babylon, in the reign of Cyrus, as recorded in the Apocrypha. Bryant observes that, in the orgies of Bacchus, the persons who performed the ceremony carried serpents in their hands, calling with horrid screams upon EVA, or the Serpent. THERMUTIS, or OB-OUB, or BASILEUS, was the royal serpent of Egypt. The Cuthites had always some legends of a serpent. At Colchis, Thebes, and Delphi, the same worship prevailed. The serpent, according to Montfaucon, was a symbol of the sun : and Eusebius has observed that a serpent within a circle, touching it at the two opposite extremes, signifies the good genius, the *Eudaimon* of the Greeks. Vossius, in his 63d chapter, on Pagan Idolatry, details the origin of the serpent worship, affirming that it commenced in Chaldea. Pythagoras brought the worship from Egypt to Greece, and thence it passed into Italy. The serpentine pillar of the Hippodrome, and the temple at Delphi, were erected in honour of APOLLO, in commemoration of his victory over the great serpent PYTHON. Esculapius, the Grecian god of physic, has a serpent emblem amongst his attributes.

In Persia, ZOROASTER, or ZERDUSHT, is represented as girded by a serpent : and in one hand of the figure, which represents the planet Saturn, is the serpent.

In India the serpent VASUKA, whom the *Surs* and *Assurs* used as a rope in churning the ocean, is too well known to need description.

In the time of PAUSANIAS a statue of MINERVA was to be seen at Argos made of marble, and which exhibited two serpents unfolded at her feet, and protected by her shield.

Colonel F. further notices that the serpent worship prevailed in Russia, and other northern nations, and also in Mexico and Peru. Faber describes the *Vitzliputuli*, or deity of Mexico, as holding in his right hand a staff, cut in form of a serpent ; while the four corners of the Mexican ark terminated in carved representations of serpents' heads. Here also was the *Cihnacohuatzi*, or "woman of our flesh," who was represented with a great serpent. The *Evil Being* of the Goths is said to have had two children, Death and an immense serpent ; the latter of which winded himself round the whole globe of the earth. The Goths were a branch of the Cuthites, who came from the Indian Caucasus ; and THOR, or WODEN, is the BUDDHA of India, the great father

No. 24.

Chakrawalang. The horizon surrounding *Meru*, and here represented by a wall of circumvallation, *Chakraván*, is supposed by a late learned writer * to have meant *Iceland*. *Chakra Varta*, in the mythology of the Ceylonese, means the hills surrounding the world, called also *Loca Loca*.†

No. 25.

SURÍYA, or the glorious sun, speeding through the heavens in his flaming car, drawn by white steeds, and driven by ARUN, or ARJUN, who is the Hindu *Aurora*, or the Dawn, and brother of GARUDA. He was the parent of the *solar dynasty* in India, and his emblem is the *Pípal* tree.‡

The Siamese represent SURÍYA as a youth, with a bow and quiver of arrows, or with a four-sided mace. He is supposed to have descended frequently in human shape, and to have left a race of men as his progeny.

He is likewise called KASSYAPA.

No. 26.

CHANDHÉMA, or PHRÁ CHÁN, “the pale silvery moon, holding *his* smooth course through the heaven.” He is a male deity, and here represented drawn by horses, while the Hindu *Chandra* is dragged by antelopes. He is also an emblem, according to Mr. H. T. Colebrooke, of the eighth *Jaina* god, or CHANDRA PRÁBHA.

of Scandinavian mythology, who dragged the serpent *Midgard* from the bottom of the sea. In Stonehenge the serpent *Hu* was venerated: and the circle at Ahury enclosed two other circles, and was attached to an enormous snake formed of upright stones, with a fourth circle for its head. (a) This god is represented with wings. In conclusion, he observes, that it would appear that the royal sacred serpent of Egypt, the serpent CANOPHIS, or CNEPH, as seen in the temples of Thebais;—the serpentine deity of Persia, as represented on the walls of Persepolis, and at Nakshi Rustam;—the serpentine devices of the Chinese;—the globe and winged serpent of the Chaldean *Magi*;—the great serpent ANANTA SESA NAGA, and VASUKA, of Hindu mythology;—the Mexican serpent;—and the MIDGARD of Scandinavia, all spring from one and the same source.

* I believe, the author of the *Key to Hindu Chronology*.

† Vol. viii. *Asiatic Researches*.

‡ *Asiatic Researches*.

(a) Faber.

The *Milinda* describes the path of the moon to be lower down than that of the sun. The Siamese call the moon *Chant,haíma t,hewa butto* ; and say he is the younger brother of the sun. There is a legend amongst them, that *P,hra Chan*, having heard a damsel admiring his rising and setting, descended in likeness of a youth, and became a favoured lover. The girl desired to ascend with him to the moon ; but he forbade her. She persisted, and accompanied him ; but, on reaching the place occupied by Ether, or *Akas*, it severed her head from her body, and she fell down into the midst of a forest.

No. 27.

Nak,hata. The star. The Siamese call it *Nak,hatarúk*. It seems to represent the real polar star.

No. 28.

Chattancha. It is a seven-fold tier of umbrellas, typical of *Meru*, and appropriated to those of royal lineage. Similar ones ornament the palace of the king of Siam, and are prominent in the Siamese system of architecture, and the decorations for festivals.

The number nine is sometimes preferred. The umbrella carried over a deceased king of Siam, when the funeral rites are to be performed, is seven-fold. The Mahomedans of India have preserved this number, if I mistake not, in the pyramid which they call *Tabut*. Seven is a favourite number with the Hindus ; and has been so from remote ages in other countries, perhaps following the number then known of the planets. Eight is a favourite one amongst the *Buddhas* of India. Nine was once a famous one in the west, and also in the north of Asia ; and it is so now amongst the Siamese. It is that of their planets, and of their deities who are inferior to BUDDHA. The number seven is that of the *Rishis*, who entered with NOAH into the ark. Its frequent occurrence in Scripture is very striking.

No. 29.

Hemawa, or *Himala*, which is termed by the Siamese *K,haú Hemaphan*, or the Himalayan Hills. In the Bali and Siamese work *Trai P,hom*, an account of this range is given. The *wa*, or termination of the above term, is, apparently, a permutation of the Sanscrit *la*, an adjective termination.

The following passage has been extracted from the *Milinda* :

O 2

“ The *Hemawa* range has 84,000 peaks. Their height (that of the greatest we may suppose) is 150 *yojanas*; their breadth 3,000; and their length the same number.” We cannot reconcile this to reason, if we take the *yojana* at what is generally considered its lowest computed length, *viz.* nine miles. The Burman computation, at this rate, is still more extravagant. They assert, as Sangermano tells us, that *Hemavunta* is 500 *yojanas* in *perpendicular* height, and 9,000 in circumference, with 14,000 small mountains piled one upon another. The height here given from the *Milinda* corresponds with that stated in the *Ratana Kalapa*.

No. 30.

Satta Maha Sara, in Siamese *Sa Yai Chet*, or the seven great lakes of *Himala*, abounding in every variety of the *lotus* or water-lily, and filled with wonderful fishes. Their shores are fringed with flowers of exquisite fragrance and brilliant hues: while the forests are tenanted by the rarest and most formidable species of animals. Below a wide-spreading tree, in these regions, lives the mighty *Elephant King*, who has a retinue of 8,000 followers, elephants like himself, and of four different colours. His wives are three in number, *viz.* 1st. MAHA SUPATSA; 2d. MACHÉMA SUPATSA; and 3d. CHUMLA SUPATSA. These were, no doubt, either queens, or perhaps kings at some former period: for it may be remarked, that spirits migrate into *either* sex after death. Sangermano tells us, the Burmans suppose that from the seven lakes of *Hemavunta* spring five rivers; the chief of these lakes being *Anondát*. The Burman and Siamese geography of *Himala* is nearly the same.

In the *Ratana Kalapa* is noticed a great lake called *Sidhantara*, in which nothing will swim.

No. 31.

Pancha Maha Nathi (or *Nadí*). These are the five rivers arising out of the seven lakes.

The Burmans say that the *Maha Nádi* flow past Arracan. The Sanscrit sacred rivers are the *Ganges*, the *Indus*, the *Sanpu*, and *Sitaganga*. Mr. Colebrooke remarked, that the country of *Jangama* lies about midway betwixt the *Malayan Peninsula* and *Verendra*; and that the *Brahma Cunda*, from which issues the *Brahme Putra*, is the same as the lake *Chiamay* of De-Banos and other Portuguese writers.

It is now pretty well known that by *Chiamay*, properly *Che-ung-mái*, is strictly understood the capital of Northern Laos. A plan of the country in my possession, drawn by a native of Siam, who resided there some time, does not contain any lake; although such may exist. The river is here made to rise from a high range of hills abounding in hot springs.

No. 32.

Satta maha Khangkha. The seven great rivers. The Siamese term them *Mé nam yai chet*, "the seven great waters." These may either mean the seven seas, or waters, lying betwixt the seven ranges of *Meru*; or they may allude to the seven Himalayan lakes.

No. 33.

Maha macha wanla mukha Samut. This is the Siamese *P,lä Wán*, or whale. Alluding, perhaps, to the god, who, in the shape of a fish, piloted the ark, or *Nawa*, to a place of safety.

No. 34.

Walahako. The Siamese *Ma Phalahok*, said to have been the famous horse of *Himala*; termed likewise the "Horse of the sky."

This seems to allude to the white horse of the *Kali Avatar*, which is yet to come. We cannot help being struck with the coincidence of a white horse being also conspicuously described in Holy Writ. He figures in Hindu chronology as the deity who watches over the seven [it ought, perhaps, to be eight, unless he himself forms the eighth] parts of the globe, which were guarded by the *Avataras*, or guardian angels.*

Perhaps this is a type of the famous *white horse of sacrifice* at the *Aswamedha Yug*, or at the sanguinary rites of the Druids, who, according to Maurice, were obliged to substitute a white steer in place of so rare an animal, as the other then was, in Britain.

The statue of the third *Jaina* deity, or *SAMBHAWA*, has the accompaniment of a golden or white horse.

In Siam a white horse is valued above all others.

The *horse's mouth* gives birth to a large river, according to the Siamese.

* Key to Hindu Chronology.

No. 35.

Kanthat Assawarat. This horse bore PHRÁ PHUTT,HA, or the Siamese SOMONOK,HODOM, when he rode towards the banks of the Jumna.

No. 36.

Sé. This represents the whip used by him on the above occasion.

No. 37.

Singha Raja, Phreea Rajhasi. These lions are thus described in the *Báli Milinda* :

1st. *Tinna Singha*, a lion, which lowers its head in walking like a white ox at grass.

2d. *Kala Singha*, a black lion, which lowers its head like a black ox grazing.

3d. *Bant ha Singha*, a lion of a light colour.

4th. *Thesara Singha*, is of a dazzling white colour, and has three parallel streaks of black which run along from its nose to the tail. Its fore feet are reddish.

The Burmans believe that there are five lions of *Hemarwunta*, one of which is red, and its roar is heard to the distance of thirty-three *yojanas*.

The lion *Avatar* is well known.

The last deified saint of the *Jainas* had a lion for his standard, according to Mr. Colebrooke. In Persia and Tartary it was sacred to the solar light.

We have likewise four lions in Scripture. And whence came our lion of heraldry? and the constellation Leo?*

No. 38.

Phayakkha Rajha. Phréa Sua Krong, or, the royal tiger.

* The Siamese Kings use a seal with a lion impressed thereon, especially on great occasions. A seal engraved with a flowering lotus is ordinarily employed; sometimes a *Yaksha* is portrayed. Lieutenant-Colonel Francklin states, that the statue of BUDDHA, as large as life, in the *Bhilsa* temple, is seated on a throne supported by four lions *couchant*. Lions are frequent at the portals of Burman temples; but they appeared to me of a very nondescript species.

No. 39.

Ubhosat ho, in Siamese *Chang Khéai*. The green elephant. One of the elephant kings of *Hemawa*.

No. 40.

Chatt hanto. This the Siamese translate by the term *Chang-pú-úk*, or "the white elephant," the King of *Hemawa*, who bore on his back RAJA CHAKA, or PHRÍA BAROMMACHAK. Hence we have one reason for the divine honours which the Siamese, and, according to Lieutenant Mahony, the Singalese, pay to the white elephant. But if the Buddhists of Ceylon venerate it because, as he affirms, they believe that BUDDHA was last incarnated in a white elephant, it only shows how ignorant they are of their own faith; and that they have fancied one of the minor states of existence through which BUDDHA is supposed to have passed, to have belonged to him in his perfect state.

No. 41.

Sakíngnak ha, or *Sakee Nak ho*. This represents the Siamese *Chang dng*, or red elephant of *Himala*. Mr. H. T. Colebrooke describes the emblem of the second *Jaina* deified saint to be an elephant of a golden colour.

No. 42.

Erawanno. The Siamese *Chang Erawan*. This elephant appertains to INDRA, the god of the firmament, or JUPITER TONANS. In an extract from a Bali work, named *Intrapati*, given to me, he is described as having thirty-three heads. In each head are seven tusks; and in each tusk seven ponds of water. In every pond are seven lotus plants. Each of these plants has seven flowers; every flower seven leaves; and each leaf supports seven princesses, each of whom is waited upon by seven slaves. These nymphs incessantly surround the throne of INDRA, softly gliding through the dance to the melody of the spheres. This is an additional instance of the great antiquity of the partiality shewn by various nations for the number seven.

Erawanno, according to the *Bali Milinda*, is described as being one hundred and fifty *yojanas* high, and his body is proportioned thereto. He seems to be the same as the *Aravata*, or one of the precious things procured by the gods, by churning the ocean with the mountain *Mandár*.

No. 43.

Usubho. This is the *Khó usupharat* of the Siamese, or the king of the white cattle of *Hemáwa*.*

No. 44.

Next is the *Mé Kho* of the Siamese. It most probably alludes to the Hindu "cow of plenty," which descended from the abode of INDRA, and remained with the *Rishí*, or holy man, JEMADAGNI, until she was forced, by the audacity of an impious prince, who attacked the *Rishí* with an army, to seek again the bright abode from which she had descended.

This cow, which is also KAMADEVA, or the goddess of love, is in unison, according to Maurice, with the symbolical representation of ISIS. It may, perhaps, allude to BAHULA of the *Itahacas*, to whom the fourth day of *Aswini* is sacred; and by whom images of her with her calf are still worshipped.*

The cow is not held peculiarly sacred in Siam; for the natives, unlike their Buddhist brethren in Ceylon, will eat beef as readily as any other sort of animal food, provided it is killed for them. The sin lies in killing an animal, not in using it for food: and there are few animals, or even reptiles, not absolutely unwholesome, which do not suit the taste of the Indo-Chinese people. The Siamese are not prohibited by their religion the use of spirituous liquors; and from experience I can affirm, that they are very prone to indulge in them when they can be cheaply and easily obtained. Brandy and English malt liquor they prize exceedingly; but the poverty

* Mr. H. T. Colebrooke informs us, that a bull is the characteristic mark of the first deified saint of the *Jainas*, whose name was RISHABHA. He is the bull of ISOURA or ISWARA, *Apis* or *Ap*, the "Golden Bull:" and we learn from Mr. Maurice, that the white bull of SRVA corresponds to that bull which is the emblem of OSIRIS, and is sacred to him. It seems also, that the ancient Britons used to sacrifice the bull, like the *Aswamedha Jug*, or horse-sacrifice of India; the Druids on the 1st of April (*a*) being accustomed to immolate two white bulls which had never known the yoke.

† Asiatic Researches, vol. vii.

(*a*) In this month, April, the sun enters Taurus; but the idea of *Sol in Tauro* was derived by the Druids from their *Brahman* progenitors, and from them it descends to the Romans.

In the next month the English May-pole was erected, which we can scarcely doubt, with reference to the religion of which it formed a part, was a *Phallic* emblem. The Hindus erect a May-pole on the same day. The Druids on the 1st of April kindled fires, typical of the solar ray.

of the mass of the people luckily prevents their becoming habitual drunkards. A regard to character has also great weight with most of them; so that however disposed to excess they may really be, they are in the main, as far as actions speak, a temperate people.

The Hindu festival of BHAVANI is also held in Siam by the keepers of cattle. It occurs in their fifth month, or *Duum-há*, and on their new year's day.

The cow is not used in the decoration of Siamese temples. We learn from Captain M'Kenzie's account of Ceylon, that the figure of the *Lingam*, the *Cow*, and every other object of Hindu veneration, were purposely removed from a Buddhist temple which he visited there.

The cow was one of the sacred things which were produced by churning the ocean with the mountain *Mándár*.

The Druids on the 1st of April gathered the sacred misletoe, and immolated a white heifer: and I find, in the Ligorian history, mention is made of a cow which licked up the ashes of BUDDHA after his body had been burned; and whose dung a Brahman who followed her collected, and rubbed over his body; and cow-dung was ever after esteemed in some measure sacred.*

No. 45.

Wechaka. Thai Lokk'ho. This is the calf.

No. 46.

Nawa, the ship. The Siamese term is *Tap'háú t'háng*, or the golden ship.

This emblem points directly to the ark of NUH, or NOAH, which, according to Sanscrit records, rested after the flood on *Chaisachan*; in the vicinity of which hills the inhabitants were Buddhists. It also has reference to the ninth incarnation of VISHNU, as BUDDHA.

Bali records allude not only generally to the destruction of the world, at various periods, by water, but particularly to the partial flood which deluged *Champ'hu t'hépé*, or *Jambu Dwípa* (the earth), rising four thousand *yojanas* above its surface.

The masts and hull of this vessel, in the Hindu system, are typical of the *Linga* and *Yoni*. The Noachic ark was also raised to the celestial sphere by

* It is well known that cow dung is profusely used by the Hindus of the present day, both as a personal unguent, and as a purificatory wash for their house-floors and temples.

the grateful descendants of NOAH: and this astronomical idea travelled from east to west. Among the Burman and Siamese constellations the ship is conspicuous; but they have borrowed the notion from Pali writings. A boat is the type of the earth; the Hindu *Argha*, the *cymbrum* of the Egyptians, the symbol of the *Yoni*. In the *Argha*, offerings of fruits and flowers are made. It is found at the portals of Buddhist monasteries in *Ava-Thái*. ISWARA is called ARGHA NATH, or "lord of the ship;" and OSIRIS, according to Plutarch, was commander of the *Argo*. The *Ossa Navicularis*, which was carried by eighty men at Egyptian solemnities; and the mystical boat, the cap of the sun, in which Hercules, they say, traversed the ocean. The PHIA CHANOK of the Siamese was shipwrecked, and swam for seven days and seven nights on the waves.

NOAH is the second MENU, or NUH, of the Sanscrit; and, in the character of a *Buddha*, prophesied of the deluge. The first MENU, or ADAM, is termed by the Siamese T_{HAÚ} MANU; and there were many of the same who successively tenanted the earth at each of those periods after it had been renovated; or more strictly, according to their ideas, after the total destruction of the old, and the production of the new world. (*Vide* No. 23.)

The Siamese, therefore, call the descendants of these *Menus*, *Manusa* or *Manutsa*. They say that in *Nawa* were *seven* kinds of *Kéo* or precious stones; which is only a figurative mode of expressing any thing superlatively excellent. These seven jewels are therefore the sons of NOAH, who entered with him into the ark, and who are termed by the Hindus the seven *Rishi*, or holy men.

In the Bali *Milnda* is a list of seven precious stones, or things, possessed by BAROMMACHAKKA. These are,

- 1st. A *Chakra*, or discus, from the *Maha Samudho*, or great ocean.
- 2d. The diamond elephant, whose lineage can be traced from the great CHATTAN, king of elephants.
- 3d. The diamond horse from the hill *Bunlabanphot*.
- 4th. The *Maní*, or great jewel. This was supposed by Wilford to mean the loadstone.
- 5th. The diamond princess, from the northern quarter of the world, or *Uttarakáro*.
- 6th. A prime minister from *Bupharwité*, another quarter of the world.
- 7th. A general from *Jambu Dwípa*. In the history of Ligor, it is noticed expressly that the relics of BUDDHA were, on some particular occasion,

placed in a golden boat, or model of a ship. This, carried in procession like the Egyptian *Argo* of old, typical of OSIRIS, was then put into a reservoir of water prepared below the foundation, or in the centre of a temple.*

No. 47.

Chammachurí. This represents the tail of the small ox of *Hemawa*, or the *Yák* of Thibet, so well known all over India as a wisp to keep off flies; and sometimes as the plume of a helmet, or a streamer at the end of a spear. These tails, or chowries, are called *Séhaburi* by the Siamese. The Indo-Chinese nations probably receive them directly from the frontiers of Thibet, or Tartary.

The Siamese call the Tartars *Cham*, which is another appellation, as we are informed by Maurice, for HAM, who is supposed to have led the first colony westward to the banks of the Nile; and hence, Egypt was antiently called *Terra Charm*, or *Cham*. Some suppose that HAM was BUDDHA.

The woods of the Indo-Chinese countries shelter a species of cattle much larger than the *Yák*. In the woods of the coast of Siam, the bison is a very powerful animal, and seems not yet to have been accurately described. I have only seen its horns; which measure twenty-four inches in length, and nineteen in circumference at the base. The termination of the black part of the horn is twelve inches from the tip, and nine in circumference.

No. 48.

Nínla (or *Níla*) *Palang*. The blue lotus, or rather water lily of *Hemawa*, called *nílot palang* by the Siamese, who, as well as the Hindus, have confounded the two species together.

When P_{HRA} P_{HOOTD}, or BUDDHA, walked abroad, say the Siamese, the lotus, in all its expanded beauty and brilliancy of colour, spontaneously grew up to prevent his feet from touching the ground.

The universality of this type of more than one religion, is too well known to require expatiating on. A few instances may however be noticed.

* Wilford says, "We are assured by Tacitus, that one of the oldest and most powerful of the German nations worshipped Isis in the form of a ship. From Egypt the type was imported to Greece, and an umbilicus of white marble was kept at Delphi."

The twenty-first *Jaina* deified mortal has a *nilot pala*, or blue water lily, for his peculiar emblem.*

The beauty of this Indian plant, together with its fecundity, must, under any circumstances, have rendered it an attractive object. The Siamese affect it in the architecture, and represent BUDDHA seated upon it. It is an ornament to all their temples, while it is an object of terror in hell, where, changing to a metal, it is supposed to catch the guilty on its sharp spikes; and an object of hope to the soul not pressed down by exceedingly heavy guilt, which it supports above the fiery abyss in its then wide expanded cup.

Each individual of the Chinese *Triad*, as observed in a temple in Pinang, is seated like BRAHMA on a lotus flower.

No. 49.

Rattang Palang. The *boadéng* or red lotus of the Siamese. The sixth deified mortal of the *Jainas*, called PADMA PRÁBHA, was of a red colour, and had a lotus for his mark.†

No. 50.

Sitapalang. This is the *boa* of the Siamese ; a flower of the lotus class.

No. 51.

Mora Púchang, or *Píncha*. The tail feathers of a peacock. It is not to be wondered at that this bird, dazzling as is his plumage to the sight, should have, in the first instance, been regarded with pleasure, and afterwards with reverence, when he had been consecrated as an attendant on the gods. The bird of JUNO has its parallel in, and was, perhaps, the offspring of eastern mythology. It is depicted along with statues of INDRA, and bears on its back the Indian JUNO. CARTIKEYA-CRÍSHNA, that stealer of the fluttering hearts of the lovely *gopís*, or milkmaids, wore on his head a peacock plume.

At the present day this bird is held sacred in India ; and those which are in the woods round temples are considered as consecrated to the divinities whose statues adorn their interior. The humanity of the British legislature

* Mr. H. T. Colebrooke, Asiatic Researches.—The *Jainas*, according to Maurice, worshipped the lotus because it was the product of water, supposed *esse initium rerum*.

† Asiatic Researches, vol. v.

has extended its protection to this as well as to other prejudices of the natives, thereby enabling the ever-calculating Hindu to contrast in his mind the humane and tolerating spirit of enlightened Christianity, with the ruthless, the desolating, and the bigoted sway of the zealous Mahomedan.

A respect for the religious observances of our Hindu subjects, however puerile or unmeaning, ought to be inculcated on British youth destined for India, as an important part of the duty they owe to the government they serve.

Whatever the natives of India now are, it ought to be recollected what they have been; and that although science with them has not reared its head to a dazzling pre-eminence, yet its germs have been preserved within the massive and antient walls of their pagodas, during the darkest ages of European history; and have, perhaps, since lit the flame of science which now blazes in the northern hemisphere.

No. 52.

Watta Sang,ho. The Siamese *Hde Sang*, i. e. the shell *Sang*. It is the chank shell, or *buccinum*, with the involutions turned from left to right. It is also termed by the Siamese *Sang Thák, hínnowát*. It is most valued when it can be found with this, I imagine, unusual conchological conformation. It is highly prized all over India, and venerated more or less by all classes of Hindus.* These shells form a considerable branch of traffic betwixt Ceylon and Bengal, being exported from the former.

When the number of convolutions of a shell amounts to ten the Siamese prize it most, because this is the number of the *Chidt*, or states of existence of P_{HRÁ} BUDDHA, which he had passed through previous to his last appearance. Maurice also informs us, that the nine valves of this shell allude to the nine incarnations of VISHNU. The *Shaphar* of the Jews seems to accord with this shell, both being applied to religious uses. In an impression of a Divine foot of BUDDHA, given in Captain Symes's *Ava*, the five toes are represented by five chank shells. But in the one in which the emblem we are now investigating occurs, five

* One of this description has been known to have been sold for two hundred pounds sterling, according to Mr. Crawford. The left-handed *buccinum*, as Sir W. Jones remarked, is an accompaniment to the paintings of CRISHNA; and the PLUTO of the Hindu mythology holds in his hand the holy shell.

five flowers of the *Dák mont,ha* (of the Siamese) form the toes. The number alludes manifestly to the five BUDDHAS : while the five flowers may allude to those flowers* which appeared when the world had been created ; and which, having been deposited in safety by a Brahman, were afterwards distributed, four to the *T,hakurs*, and one to SACYA. The Bali account of the *Phrabát* does not describe the types which form the toes ; which accounts for the variation found in several *Phrabáts*, and favours the supposition that it was originally a mere hieroglyphical table.

Whether the fanciful history of PHRÍA HÁE SANG, the shell king, which has been worked up by the Siamese into a poetical romance so called, has given rise to the veneration they entertain for the chank, I cannot tell. This king lived in a shell, his subjects following his example. I think the whole is connected with the account given by the late Colonel Wilford, of a tribe on the borders of Egypt who lived in caves with mouths like shells. The Siamese represent PHRÍA ARAHAN as dwelling in a shell during one of his changes.†

The conch was one of the precious things obtained by the gods from the ocean after they had churned it with the mountain *Mándár*.

No. 53.

Chattu Muk,ha, “the four-faced,” meaning BRAHMA ; who is called by the Siamese PHROM, or PHRAMA. BRAHMA is however supposed to have had five heads originally ; from whence may have arisen the belief of the five manifestations of the deity.

The well-known story need scarcely be noticed in which BRAHMA falls in love with GANGA, who had sprung, like armed PALLAS, out of his head. BRAHMA turned away from his daughter three several times, at each of which a new head sprung forth. The four heads are deemed by Maurice symbolical of the four quarters of the world, or of the four elements.

In this *Phrabát* he is portrayed with the peaked tiara, typical of the solar

* Asiatic Researches, vol. v.

† CRISHNA used the conch which he drew from the ocean in his search for two lost children ; and the *Jamabos*, or mountain priests of Japan, as Kempfer tells us, employ a shell of the same species as an emblem of their sect. According likewise to Mr. Colebrooke’s account of the *Jainas*, the chank is a characteristic symbol of their twenty-second god, or NEMI NATH.

ray; the *Tris* or trident, in one hand, and the *Phra Khan*, which is a four-edged weapon or mace, in the other. He is supported as usual on the lotus; but I cannot find that the Siamese know anything of his history, as received by the Hindus. Under the head *Meru* may be seen the account of their ideas on the subject.

The trident, when held by *SIVA*, is symbolical of fire. It is borne also on the Siamese war flag at the top of the staff. *BRAHMA* is supposed to have lost, through pride, one of his heads.*

No. 54.

Phummarocha. This represents, the Siamese say, the *Méng P_ho t_háng*, or beetle of the Golden Mountain.

The *Scarabæus* is well known to have been one of the most venerated and universal symbols amongst the Egyptians. Maurice informs us, that the antients fancied that it was emblematical of the sun retrograding; because it was supposed to be of the male gender only, and as it rolled its balls of sand backwards. The Moth, or *Phalæna*, of the antients, was a constellation. The Burmans have likewise a Moth constellation.

No. 55.

Surwanna Kachhapo. This is the Golden Tortoise, or the Siamese *P_hrí'a Taú Tháng*.

The *Meru* of Sanscrit writers rests on the back of the tortoise *CESAVA* or *HERI*. An account of this animal is said to exist in the Bali *Pannowat Sattang*.† It is also the *Testudo* of the sphere, and the Hindu emblem of strength.

No. 56.

Hangsa-cha. This is the famous *Hunza*, or goose, of the Brahmans. The Siamese term it *Hong* or *Hongsa*; and say it lives and breeds in holes of the rocks, and descends into the marshy plains to feed. The *Hunza* is blazoned on the standard of Ava. The real bird so called is not however found, I believe, in that country.

* Asiatic Researches, vol. iii.

† A tortoise is the emblem of *MUNISUVRATA*, the twentieth deified saint of the *Jainas*, according to Mr. H. T. Colebrooke.

No. 57.

Mangkaro is the aquatic monster called *Mangkán* by the Siamese, and which occupies the place of our Capricorn in their sphere.

It seems to be the same as the Sanscrit *Macara*, whose figure shone on the banners of love, or KAMADEVA; and which, in the songs of JAYADEVA, so elegantly paraphrased by Sir W. Jones, is represented as a horned shark. The representation of it on the *Phrabát* we are describing, is a sort of horned alligator, and very nearly corresponds with the Japanese *Dsya Tats dsya*, exhibited by Kempfer in his History of Japan. He says the Japanese believe it dwells at the bottom of the sea, and is a huge long four-footed snake, scaly all over the body like the crocodile.*

No. 58.

Karawíko. In the Siamese language *Nok karawek*, the melodious bird of Paradise.

It is here represented without feet, and is so far distinct from the Chinese and Japanese *Foo*, as exhibited by the learned Kempfer in his History of Japan,† which is an Argus pheasant.

This *Foo* only visits the earth upon some great occasion, such as the birth of a *Sesin*, or benevolent Sage.

The *Karawíko* has a good deal of the appearance, in shape at least, of the bird known in Europe by the name of the bird of Paradise; which, in truth, without its tail, would be considered a very ugly magpie.

The notion which long prevailed, that the Indian bird of Paradise had no feet, has been of course long exploded. The fact being, that the bird-catchers cut them off because they are long and unseemly.

The Malacca bird of Paradise is termed by the Siamese *Karawek*.

The Bali *Karawíko* lived in the hill *Kant,hare watsatí*, in *Himala*; and it may be observed, that all their fabulous animals and birds are represented as existing among the *Himala* hills.

The Siamese *Kaifá*, literally Fowl of the Sky, is a beautiful species of the peacock, or Argus pheasant ‡

* Mr. H. T. Colebrooke mentions, that the *Macara*, or marine monster, is the mark of the ninth *Jaina* god, called PUSHPADANTA.

† Tab. ix. fig. 7.

‡ The woods of Siam, and the Peninsula of Malacca, shelter birds of the most splendid plumage, from the quail up through the numerous varieties of the partridge and jungle cock, to the

No. 59.

Kínaro. The Siamese *Kí nán*, or two figures ; half bird, half human. They are depicted also at the foot of *Meru*.

No. 60.

Mayuro. A bird so called.

No. 61.

Kaja Raja. The *Nok Kariun* of the Siamese, which is a bird, they say, inhabiting the valleys of *Himala*. I have had no means of ascertaining the real import of the name of this Bali bird. According to their traditions, it eats iron filings in its food, which are mixed purposely with it seven times. The dung is collected ; and from this the finest tempered swords are made.

No. 62.

Chakkarawathí. Another bird ; the *Nok Chakkaphak* of the Siamese.

No. 63.

Chíwa kunchika. The Siamese call this bird *Pphría nokkrakít*, by which they seem to understand an eagle, or hawk. The falcon, according to Mr. H. T. Colebrooke, is an emblem of the *Jaina* god ANANTA, the fourth in succession. JUPITER with his eagle is VISHNU ; and becomes INDRA as JUPITER TONANS. The KHRÚT of the Siamese, or GARUDA, has also the beak and talons of an eagle.

No. 64.

Supanno. The Siamese KHRUT or GARUDA, the Hindu bird of *Herí*. Bali writings fix his abode in the second sphere, or heaven, the *Maha Rajika*. Here he abides amidst the wide expanded branches of the thorny tree termed *Merucha Símp,halí ruk,ha*, whence he pounces on the *Nak,ho*, or snakes ; a people who, it appears from the writings of Wilford,

peacock and Argus pheasant. It is much to be regretted, that in these regions the pursuits of the naturalist can only be continued as it were by stealth, the jealousy of barbarous governments combining with the unhealthiness of thinly peopled and thickly wooded countries, to retard all systematic investigation.

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were, as well as the GARUDAS, races of men descended from ATRÍ, who sprang from the mind of BRÁHMA.

I have in another place given a list of snakes which GARUDA will not devour. Perhaps these names may yet be identified with those of princes who have governed different provinces of India.

The more we penetrate into the mythological writings and traditions of the natives of Hindustan, or into those of the extra Gangetic nations who have adopted kindred schemes of religious belief, the more shall we be satisfied that very few indeed of their legendary narratives are entirely destitute of some foundation in history. It is not therefore advisable to reject what may wear the aspect of pure fable, for such may often lead us to results to which we could not have arrived by any other route.

Sanscrit records place GARUDA in his own *Van*, or forest, called (agreeably to the above authority) *Garutmatvan*; in which, perhaps, the famous *Bamian*, and also the Mosaic Eden, were situated. He is the eagle of the preserving VISHNU, who was produced from an egg in the Paradise of Eden; and who afterwards stole the *Amríta*, or water of immortality. Hence his beak is white. He is elsewhere called the son of VINATA.

KHRUT is a favourite bird with the Siamese. But they evidently connect him with some dynasty of kings. I will, therefore, briefly describe one of their legends respecting him, which they told me has been extracted from the Bali *Nípat,ha*. It is wrought into a romantic legend in their own language, and termed *Ru-ríng P,HRÍA P,HRMMAT,HAT* of *P,harandási* (or Benares), and NANG KAKÍ his queen. The Bali designations of the king and queen are P,HRAMAD,HAT,HA *Raja*, and KAKÍ *Narí*.

This princess had a lovely countenance, with a frame of exquisite symmetry, which possessed likewise such a heavenly fragrance, that the senses of ravished man were overpowered to a distance from her of seven *yojanas*, or about sixty-three miles.

The king had a prime minister, K,HON THAN, who had the faculty of being able at any time to transfer his soul into the body of any animal, or to change his own body into the likeness of one. He was likewise a skilful musician. It so happened that GARUDA, in shape of a handsome youth of polished deportment, visited the court of King P,HRMMAT,HAT, and was invited to play a game at chess (the *len saka* of the Siamese) by his majesty. While at play, the ladies of the palace, with their attendant

maidens, beheld GARUDA; and instantly, from gazing on his beautiful countenance, forgot the duty they owed their lord and king. GARUDA soon perceived the impression he had made on the affections of the accomplished queen, and determined in his mind to carry her off. Accordingly, at night he assumed his bird-like form, and approaching the window of her apartment he placed her on his back, and then flew towards *Símphatí*.

The minister, K_{HON} T_{HAN}, was aware of the elopement, and devised a scheme to recover the lady. When GARUDA next played at chess with the king, and was departing, the minister reduced his body to the size of a mite, and fastening himself on the back of GARUDA, he was in the evening transported by him to his abode. He remained here seven days unknown to GARUDA, and endeavouring to persuade the lady to return, to which she at length consented. K_{HON} T_{HAN}, therefore, on the next visit of GARUDA to the king, and while they were busy at their favourite game, serenaded them with his voice, accompanied by his violin or guitar. Singing these words :

How elevated is the lover when smiled on by his mistress. Even here my sinking senses are refreshed and delighted by the fragrant zephyr—the breath of that lovely one, whose dwelling-place is in the forest of *Símphatí*.

The quick ear of GARUDA caught the tormenting sounds. He speedily returned to his abode; and upbraiding KAKÍ *Narí* for her coquetry and fleeting attachment, conveyed her back to the palace of her husband.

In the *Bali Milinda* it is stated, that GARUDA's thorny tree, in the *Maha Rajika*, is, in circumference, 15 *yojanas*; from the root to the first branch, 50 in height; and the circuit of the foliage and branches 100 *yojanas*.

GARUDA is in girth	...	...	...	...	<i>yojanas</i>	250
The width of each wing	...	...	...	...	do.	50
His tail, in length	...	...	...	...	do.	60
The circumference of his throat	...	...	...	...	do.	30
Width of his mouth	...	...	...	...	do.	9
Expanded feet each	...	...	...	...	do.	12

The rest of his body is proportioned to these dimensions.*

* The Chippewans believe that a mighty bird, whose eyes were fire, whose glances were lightning, and the clapping of whose wings was thunder, was once the sole inhabitant of the globe.—*Vide* Mackenzie's "Pacific Ocean."

No. 65.

Hera is the name of SÍVA; *HERI* is VISHNU or HORUS.

No. 66.

Sungsu is the Siamese *Takhe*, or alligator; and the *Kumbhira* of the Hindus.

RÁHU had a numerous progeny of *Grahas*, or crocodiles: and we learn from the Asiatic Researches, that Ælian affirms that TYPHON assumed the form of a crocodile; he being the eternal enemy of OSIRIS, who, Maurice tells us, was elevated to the sphere under the same emblem. The Siamese have the *Takhe*, or Bali *Kumbhila*, constellation of the alligator.

The Egyptian TYPHON was red; RAHU is black, or of a dark colour; and the Siamese say that the king of *Sawat-hí*, called PHATSAWÍN, enquired of BUDDHA the reason of eclipses of the moon. This account is from the Bali works *Chant-hag-hat* and *Sunt-hag-hat*.*

No. 67.

Toranang. The Siamese *Roa Rani-ut*, or “wooden fence,” which they say surrounded the house of SOMONOKHODOM.

No. 68.

Mané t-hamang. The Siamese *P-ho-ung*, or gold and silver things.

No. 69.

Bunt-haré kang tat-ha, a flower. There are three names occurring together in the Bali ritual, which have not been clearly explained to me: *Bunt-haré kang*, *Bunnakato*, which is apparently the Siamese *Bun Ná k*, and the *Bunnapoting*.

No. 70.

Makulla. The Siamese *Dák p-hékun*. Five of these flowers represent the toes of this *Phrabát*. They seem to resemble the marigold.

* The antient records of Egypt show that the first king of the world was killed by an amphibious animal, or “Lord of the River,” i.e. the Lunar race; implying that he was overcome by a prince of the Lunar race.

No. 71.

Parechatta. The Siamese flower, *Dák mont/ha*, which, they say, grows only in Heaven.

No. 72.

Baraphet. Nine sorts of precious stones. The nine gems, perhaps, of VICRAMADITYA's court. King BAROMMACHAKKRA had seven of these, according to the Bali *Milinda*.

No. 73.

Mahéngsa, or *Mahesélo*. The Buffalo, or Siamese *Khwai*.

This animal, as Mr. H. T. Colebrooke has informed us, is a distinguishing mark of VASUPUJYA, son of VASUPUJYA, by JAYA, and the twelfth god in succession of the *Jainas*.

No. 74.

The hills *Sattaphanp/hot*, or *Sattapharép/han*.

No. 75.

Rama Sura. The Siamese *Rama Sun*, or *Rakhsha*.

No. 76.

UTDHA TAPASA, *Maha Rishi*. The Siamese *Rusí*, or the great *Rishi*; who figures also amongst the Siamese and Burman asterisms. He is, like the *Deva shís* of the Hindus, supposed by the Siamese to be still alive, and to be older than BUDDHA.*

No. 77.

Dha Chang. Perhaps the bow of RAMA, which no mortal could draw, and was only used by RAMA and BUDDHA.

* In their Histories of *Phra Pathom* he seems alluded to under the title of UTTAKHUT (*Assagutta* in Bali), who performed sundry miracles. The *Maha Rishis* are elsewhere the seven preceptors, or great saints; Adam being the first. This *Maha Rusí* has his rosary of 108 beads, to note so many prayers or sentences. The Brahmans, the Buddhists, the antient Mexicans, the Romans, the Chinese, the Mussulmans, and the Roman Catholic Christians, all use beads.



No. 78.

Pato.

No. 79.

Kelasa Bapphato. This is, perhaps, another name for the mountain *Cailas*. It is the Siamese *Khai Khailat*, where SÍNLAYON was king. He had two daughters, who put on wings, and alighted on the earth. Their names are SUWANNA MALÉ, and SUWANNA MALAÍ. On alighting on the earth they perceived King THEPPHA SÍNTHONG, with his wife by his side, asleep in a wood; and lifted him up into *Khailat*. Their father told them to keep him as their husband. SÍNTHONG, however, fled during the night, and reached the foot of the hill. After long search in other countries he found his wife. The *Thewata* again descended, and stole his wife from him; and gave her to their father, who ordered care to be taken of her. She brought forth a son to her husband SÍNTHONG; who, when he reached the age of seven years, descended to the earth to search for his father, accompanied by his mother and the *Devatas*. He slew those who attacked him by means of the heavenly bow he carried, and at last reached the country of his father.

No. 80.

Utsat,hi. The Siamese star *Dáu Kammaphruk*.

No. 81.

Kangsatala.

No. 82.

Salawanang. The Siamese *So-rin Kéo*, or diamond garden. There was a famous garden in INDRA's country, and another in *Lanka Dwípa*, which, in the *Ratana Kalapa*, is described as having been known by various names at different times. Thus, in KAKUSUNDHA's time, it was termed "*Maha Megawannuyamang*;" in KONAGAMANA's time, *Vannuyanang*; and in KASSYAPA's period, *Sagarawana*; when JAYUNTO RAJA reigned at *Wisalapuré*.



No. 83.

Awa Vatsawannang. The golden goblet.

No. 84.

Pak,hanang. The Siamese *Thoeí Chang*.

No. 85.

Paduka. The slippers.

No. 86.

Thewa Thittamaní. The Siamese *Nang Mekhala*, or “goddess of the clouds.”

No. 87.

Suwanna Mik,hi. The Siamese *Sai Tháng*, or golden deer.

Perhaps it alludes to the golden deer which (being in fact her ravisher disguised) carried off SÍTA, the wife of RAMA, to Ceylon.

Mr. H. T. Colebrooke informs us, that it is an emblem of SANTÍ, the sixteenth *Jaina* god.

No. 88.

Kukkutáwannang. The Siamese fowl *Kait,hurin*.

No. 89.

Daú Rohíní. Described under the chapter on constellations as *Rohini*.

No. 90.

Sáe of the Siamese. An ornamental part of the dress of any great personage, and apparently similar to the mark which Mr. H. T. Colebrooke notices as the distinguishing emblem of SÍTALA the tenth *Jaina* god. This figure is called *Srivatsa*.

No. 91.

Saticha. The Siamese *Hák*, or spear.



No. 92.

Sri Watchocha. The Siamese *P ho-ríng Kéo*, or diamond ornament.

No. 93.

Nat,hí yacha. The Siamese *So-ún Kéo*, or diamond garden.

No. 94.

Sawatt,héko. The Siamese name for this part of a princely wardrobe is *Sae Khá Khráng*.

No. 95.

Watalo. *K,hun T,hon*, as the Siamese call it, is a part of the head-dress which falls down and covers the nape of the neck.

No. 96.

Tra D,hama Nancha. The Siamese *Do-ring Kéo Maní*.

The "inestimable jewel," the type of mental illumination, the Hindu *Kasebúth*, which shone refulgent to enlighten the earth from the sacred breast of NARAYANA.

NOTES.

WHERE Scandinavian mythology is alluded to, the remarks have been taken from an article on the elder *Edda*, &c. in No. VIII. of the Foreign Quarterly Review.

The Horse. BALDER of the Scandinavians had his horse, called SLEIPNER, which, with all its trappings, was cast into the funeral pile. The Greeks had their white horse, Eos, careering round Olympus.

SIVA's chariot of victory was dragged by the seven-headed horse of the sun.*

Maha Meru. The Scandinavian cosmogony is closely allied to that of the Buddhists of Ava and Siam. In the former, the earth rests on, or is encompassed by water. There was the hill, *Asgad*; also, the rainbow bridge, which, like INDRA's ladder of gold, was the medium of communication between earth and heaven. There were on the hill *Asgad*, in *Valdhall*, the abodes of the ASER, the Hindu ASSUR, or perhaps

* Lieut.-Colonel Tod's Méwar.



SURS, and the EINHERIAR, which occupied the middle of the hill. Above these abodes were twelve others, surmounted by *Himinsbjong*, or "heaven's castle," where HEIMDAL (the presiding god of fanes and temples) sat quaffing at his ease the mead of the gods, the counterpart of the bright Buddhist LÓKE, who, in shape of a luminous spheroid, rests in a state of ineffable bliss on the summit of the heavenly pyramid. The *Asers*, or *Surs*, fought with the *Vaner*, or Air Spirits. Beneath *Asgard* is an airy region inhabited by bright spirits.

In Mr. Hodgson's Sketch of Buddhism, we find the following account of *Meru*. The mansions, or *Agnishtha Bhawana* are:—

1st. That of ADI BUDDHA, the Creator: *i. e.* *Light*, before all. Corresponding with the spheroid above alluded to.

2d. Ten to fifteen mansions.

3d. Eighteen *Bhawana*, or *Rupa Vachara*, subject to BRAHMA.

4th. Six other mansions subject to VISHNU, or *Kama Vachara*.

4th. Three *Bhawana* of MAHA DEVA.

5th. INDRA'S *Bhawana*.

6th. YAMA'S *ditto*

7th. SURYA'S *Bhawana*.

8th. CHANDRA'S *ditto*

9th. Fixed stars and planets down to *Agni*.

10th. *Agni Bhawana*.

11th. *Vayu Kund* (wind).

12th. *Prithvi*, the earth; then *Jala Kund*, or the world of water.

13th. Seven *Dwipas*.

14th. Seven seas.

15th. Eight *Parvatas*.

16th. Seven *Patala*: the seventh being hell, or *Naraka*, divided into eight abodes.

Captain Sykes notices,† that "in the *Tin Lokh*, or cave, at *Ellora*, dedicated to BUDDHA, are three stones, typical of hell, earth, and heaven; and that in Buddhist temples in India there are enormous hemispherical masses of stone, which may be compared with the *Ling*." But may they not rather be compared with the spheroid just described, or with the mundane egg?‡ The *Ellora* caves he presumes to be anterior to the Brahminical faith. They contain inscriptions in an unknown character. Mr. Crawford saw inscriptions on slabs of sand-stone found in Buddhist temples in *Ava*, which he considers to be in unknown characters. A comparison between the two might be useful.

* In the Bali writings air is represented as contending with air. The Siamese say that RAMA-SUN (they cannot pronounce the *r* final in SUR) fights, or fought with PHRA EEN, or INDRA; *i. e.* the ASSURS contend with the god of the firmament.

† Bombay Literary Transactions, vol. iii.

‡ Burkhardt describes an oval sacred stone as existing at Mecca, which pilgrims kiss.

Five Rivers. "The *Yamuna* had on its banks the city of *Surapoor* (Siamese *Siraburi*), the capital of the *Yaaris* of *Vrij*."*

Manutsa. Mankind. There were *Devas*, observes Captain Sykes, who came from the *Abhaswara Bhawana* of BRAHMA, and eat of the earth. They were led by MAHA SAMVAT.

INDRA. He is the THOR of *Scandinavia*, and wields the short hammer, or thunderbolt, which is the characteristic weapon of both. They were alike the benefactors and guardians of mankind.

Naraka. Below the earth, and the waters under the earth, and the air under the waters, lies the Buddhist hell—the Scandinavian "regions of dwarfs and black elves."

Chandra. The moon or crescent was SIVA's distinguishing mark, and was worn upon the forehead.†

PHRIYA NAK, *Maha Naga*, is represented in the Scandinavian cosmography as encircling the world, and having his tail in his mouth. In this system he is termed YORMUNGANDAR, or earth's serpent.‡ Lieut.-Colonel Tod observes, in his Account of Mewar, that the serpent is an emblem of BUDDHA, or wisdom, and was frequently conjoined with the *lingam*, as at the shrine of *Eklinga*, where the brazen serpent wound round the *lingam*. The serpent was the *subtlest beast of the field* in the earliest days of the world, and he was borne aloft as the brazen serpent.

BUDDHA is confounded with the serpent, according to Lieut.-Colonel Tod, who states that ELLA (*query* HELA), daughter of ISWARA, son of the sun, was ravished by BUDDHA, the serpent. Hence sprang the *Manus*. The rape of Venus by Mercury is represented, in temples at Pompeii and Portici, by a serpent entwining a *lingam*. Such, no doubt, was the origin of the brazen pillar at Constantinople, entwined by serpents, which survived the destroying zeal of the Mussulman invaders. "The wars of the *Pandus* and *Takshas*, the professors of the old and new religion respectively, were typified by serpents and dragons."§

GARUDA. *Kan* (according to Lieut.-Colonel Tod), otherwise *Kanya*, had, like the Apollo of the Nile, a human form with an eagle's head. The eagle of VISHNU assimilates to the raven of ODEN, which last personage is termed in Scandinavian mythology the raven god.||

Nawa. The ship—the ark. BALDER, of Scandinavia, had his ship.¶

Eko Rukkho, the tree. In Ceylon, the pipal tree is said to have been planted by DUGDHA CAMINI, a king of the country, in the year 414 B.C.

Bull, Cow, and Calf. The steed of ISWARA and his consort ISA. The idolaters known to the Israelites worshipped the bull or cow, else they would not have formed a golden calf in the wilderness.

* Colonel Tod's Mewar, in the second volume of these Transactions.

† *Ibid.*

‡ *Vide* Foreign Quarterly, No. vii. Art. *Elder Edda*.

§ Lieut.-Colonel Tod's Mewar.

|| *Elder Edda*, Foreign Quarterly.

¶ *Ibid.*

PHRA SURIYA, the sun. Lieut.-Colonel Tod notices, in his Account of Mewar, that the Celtic Apollo had his shrines at Carnac in Britany, and was called *Carneus*, or sun god. In Jamieson's Scottish Dictionary, under the head *Neid Fyre*, it is noticed, that the ancient Druids superintended the ceremony of raising a sacred fire annually on the first day of May. That day is still, both in the Gaelic and Irish dialects, called *La-beal-tin*, i. e. the day of Baal's fire, or the fire dedicated to Baal or the sun.

Worship of the Tiger and Dog. Lieut.-Colonel Tod notices that in India the dog is not deified, although he is sacred to BHAIRAWA, the elder twin son of KALICA, and the god of battle. This deity is sculptured riding on a dog with the martial horn, *napairi*, in one hand, and the *damru*, or small drum, in the other.

Lions and Tridents. SIVA, or MATA his consort, is in every battle riding on a lion and holding a trident.

Elephants. IBN BATUTA (see English translation) tells us, that the kings of Ceylon formerly (meaning before his time) found white elephants on the island.

The Phrabát, or Foot. Without Damascus, saith IBN BATUTA, on the way of the pilgrimage, is the "Mosque of the Foot, which is held in great estimation, and in which there is a stone having upon it the print of the foot of Moses."* On this passage the translator very aptly remarks, that "there can be no doubt, I think, that these marks of the foot, whether we find them at Damascus, in Ceylon, amongst the Burmese, at Mecca, or wherever else, are nothing more than remains of Buddhism." IBN BATUTA further notices, that "ABU ABDULLAH IBN KHALIF first got permission from the prince of the division of Ceylon nearest to the Foot (on Adam's Peak), to open a road to it for the benefit of pilgrims; and that at a former period the Chinese went to Ceylon and cut out from the stone the place of the great toe, together with the stone about it, and placed it in a temple in the city of *Zaitoon*, and pilgrimages are made to it from the most distant parts of China."

In Burkhardt's Travels in Arabia the Mecca stone is described, on which, it is said, is the impression of the foot of Ibrahim, or Abraham, made when he was erecting the *Kabaa*; but that no *Hadji* has ever seen it, as it is railed in and covered.

The Altar. On reading Burkhardt's minute account of the *Kabaa* at Mecca, it seems to me very probable that it is merely an altar on a large scale, fashioned after that which the idolater's temple (which in ancient times occupied the site of the *Kabaa*) contained. This *Kabaa*, he informs us, was supposed to have been framed originally in heaven. A considerable analogy would also appear to exist between the shape, construction, and ornaments of the tabernacle and altar described in Exodus, and of those of the *Kabaa*. In the Sacred Writings it was forbidden to make steps up to the altar,

* The Rev. Professor Lee's Translation, published by the Oriental Translation Committee, p. 30.

and there are none to the *Kabaa*. The court of the tabernacle was an oblong square ; so is that of the *Kabaa*. The tabernacle is described in Exodus as having been constructed under Divine superintendence. The *Kabaa* is represented as having been first erected in heaven, about two thousand years before the Creation, and afterwards by Adam on earth.

IV.—*Notice respecting the Natives of New Guinea. By WM. MARSDEN, Esq.,
F.R.S., M.R.A.S. &c.*

Read July 3, 1830.

THAT the extensive island of New Guinea (by the Malays denominated *Tanah Papūah* or land of people with frizzled hair) should be less known to Europeans than almost any other part of the Eastern Archipelago, may be chiefly attributed to the savage manners of its inhabitants, whom the more civilized race of people in the neighbouring islands have always represented as cannibals ; but of the justness of which imputation no direct proofs have hitherto been furnished by our navigators. How far the following detail of circumstances may warrant a belief that a practice well ascertained to exist in Sumatra and New Zealand, prevails also in a district of this country, the reader will form a judgment for himself, upon estimating the degree of credit to which it is entitled. The evidence of what is so abhorrent from our nature ought, doubtless, to be free from the suspicion either of credulity, or of a disposition to the marvellous; but on the other hand it may be questioned whether those who, from attachment to preconceived opinions, endeavour by captious arguments, or by ridicule, to discredit what is supported by unexceptionable testimony, are not equally enemies to the cause of truth, with those who by plausible relations give colour to what is false.

The Northumberland East-India ship, commanded by Captain Rees, sailed from Bencoolen early in March 1783, on her way to China, and, on account of the season, proceeded by what is termed the Eastern passage. On the 30th of that month she anchored in a bay situated in latitude $2^{\circ} 26' S.$, on the north-west part of the coast of New Guinea; which seems to be the Freshwater Bay of Dampier. What follows is extracted from the Log-book of that ship :—

“ April 1st. Sent the boats on shore with the second and fourth officers, to reconnoitre, as we are in want of wood and water ; but on their getting near the shore, found the natives in great numbers on the beach, and the

officers, not liking their appearance, thought it prudent to return to the ship without landing.

“ 2d. Sent the boats on shore under charge of the first and fourth officers, with some presents, to endeavour to make friends with the natives. At one P.M. the long-boat and jolly-boat returned to the ship, and informed me that the natives had run away with five of the Lascars and taken them into the woods. Immediately sent the jolly-boat to the assistance of the cutter, which had not returned, and soon after observed a firing on shore. At seven P.M. the cutter returned and informed me that the jolly-boat had been cut off; that Mr. Sayer the chief officer, Mr. Niven the fourth officer, and a Mr. Holmes, with six of the boat's crew, were killed on shore by the natives, and that the cutter had a very narrow escape of having been cut off also, being chased by many boats; but on three shots being fired at them from the ship, they returned to the land.”

About two years after this unfortunate occurrence (no memorandum of the precise time having been preserved), an opportunity presented itself of acquiring some knowledge of the subsequent transactions on shore, by an examination of three persons who were among the number of those made prisoners on the occasion, and who had fortunately been enabled to obtain their release. One of these was an Englishman, a carpenter's mate of the ship; the other two were Lascars, of which class five in the whole were saved. From the former no satisfactory information could be procured, as it seemed to be his object to raise the importance of his adventures by giving them a romantic air. Paying, therefore, little further attention to him, I proceeded to question the black sailors in the Malayan language, of which they had acquired a competent knowledge, either in some previous voyage, or during their latter residence with the people to whom they owed their deliverance.* These were plain men, but not deficient in intelligence, who shewed no disposition to disguise or exaggerate the truth, and gave clear answers, distinguishing what they had themselves seen, from what they had been told. The following is briefly the substance of their relation :—

* It appears from the journals of Dampier, Forrest, and others, that the inhabitants of the islands on the western side of New Guinea, and even of one so near to the coast as *Pūlo Sabuda*, are of the race commonly termed Malays. At an island of this description it was that M. Sonnerat had intercourse with some *Papūah* people, and not on the main.

The name of the place near to which the ship anchored they called *Braou*.* In the fight that ensued between the crews of the boats and the natives, the former were overpowered; several of them were killed, and others made prisoners. When first seized, their hair was cut off, their hands were bound, and ropes were fastened about their necks; but they were afterwards suffered to go about freely in the day-time, and only at night had clogs attached to their legs, to prevent any attempt at escape; for which reason also they were kept in separate huts, that the less opportunity might be afforded for concerting plans. They were not treated with severity, were not beaten, nor compelled to work, and had a sufficient allowance of provisions; chiefly sago-bread.

The dead bodies of the people belonging to the boats, who fell in the attack, were *eaten* by the natives, according to their usual custom; but none of the prisoners were killed for that purpose, nor, as far as they knew, were they in the habit of feasting upon the bodies of any persons sacrificed for the occasion. No distinction, however, is made between such as are slain and those who die a natural death. Of three Europeans thus devoured, they were eye-witnesses of the fate of two; one of them a mate, the other a midshipman or petty officer: the third was a Portuguese helmsman, who was not eaten in their presence. The Lascars were desired by the people not to be alarmed at these proceedings, but to go to sleep; no harm being intended to themselves. The flesh was cut from different parts of the body and limbs, with small knives, then prepared by heating over the fire in earthen vessels, and eaten without salt or pepper.† The bones they broiled slightly, and when the remaining flesh was picked off, they were laid up in the house, in order to their being afterwards employed in the manufacture of weapons, tools, and fish-spears; specimens of which these people brought away with them. The skulls, being stripped of the flesh, were kept in baskets. On occasions of this kind a number of persons are collected together from the neighbouring dwellings; such meals not being made in a private or family way, although the bodies of friends and relations are eaten, as well as those of enemies. Both are treated in the same manner.

* This name is not found in the maps, but I read it in a Malayan letter from the Sultan of *Tidore*. The European called the place of his captivity, *Yaloupe*; but the prisoners may have been distributed among different villages.

† The *Battas* of Sumatra, in such feasts, use both; the red or chili-pepper being understood.

There is no deficiency of provision in the country. Sago in particular, of which they make a kind of bread called *toyo*, is abundant.* They also eat fish, worms picked from rotten wood,† and the vermin from their heads. They are uncleanly in their persons ; never washing the body, which, they say, is injurious to health. The running water of the place, and what the natives drink, is of a red colour, proceeding from the quality of the soil ; but their favourite beverage is toddy or palm-wine, drawn from the sago-tree, with which they intoxicate themselves, not only at their feasts, but habitually in the evening.

The inhabitants are very numerous. Ten thousand men (according to the ideas of the Lascars) would not be sufficient to subdue them : yet they have no king ! Each house or family seems to be independent, and is in the continual practice of making war on its neighbours ; seizing each others' wives and children and selling them for slaves, to the people of the adjacent islands. They go naked for the most part ; the men sometimes wearing a covering made of the bark of a tree, and the women a sort of apron of a loose texture, reaching to the knees. Bows and arrows, as well as spears or lances, are commonly employed.

The small knives before spoken of they procure from an island named *Onin* or *Honin* ; of the inhabitants of which the *Braou* people stand much in awe.‡ These the Lascars described as a civilized race, reasonable in their conduct, and behaving to strangers accordingly as they themselves are treated ; returning good for good and evil for evil. Their religion is that

* For an account of their method of preparing this bread, see Forrest's Voyage to New Guinea. He brought to England and gave to Sir Joseph Banks, one of their earthen ovens for baking it.

† Such worms are also a common article of food with the natives of New Holland, who climb old trees to procure them.

‡ I do not find this island laid down in any chart, but in Valentyn, vol. iii., incidental mention is made of it. Captain Forrest's Voyage also contains the following passages that seem to apply to it :—" North-east of *Goram*, one day's sail, is *Wonim*. In Keytz's Voyage mention is made of *Onin*, which I take to be *Wonim*, being 20 leagues north-east of *Goram*.The people of *Ef-be* told me, that a day's sail south of *Wonim*, a gulph stretched far into the land of New Guinea." If this gulph, as is probable, be meant for M'Cluer's Inlet, *Onin* should lie between the first and second degree of south latitude, and we may suppose it to be the island described by Dampier, in lat. 1° 43' S., the inhabitants of which, he says, " are a sort of very tawney Indians, with long black hair, who in their manners differ but little from the Mindanayans

of *Islām*, and the language of the Malays is familiar to them* The *Papūah* people of the coast nearest to this island of *Onīn* are subject to its *raja*. They resemble the natives of *Braou* in person, complexion, and frizzled hair; but speak a different dialect, and do not eat human flesh.

By the interference of this *raja* it was that our prisoners, after a detention of about six months, obtained their release; but in what mode, whether by ransom or intimidation, I could not satisfactorily learn from my informants, who probably had not themselves much knowledge of the negotiation. "As the *Braou* people (said one of them) did not require us to work, and we were only a burthen to them, I do not know with what view they kept us; unless it were to make a meal of us one day or another." But their own previous statement of the native customs shews that such an apprehension (however natural in their predicament) was groundless, and the more obvious motive for the detention of the prisoners was the chance of their being ransomed. Be this as it may, it appears that this remnant of the sufferers was picked up at one of the islands by another India ship (the *Queen*, I believe) and conveyed to Canton.†

Such is the limited extent of the information obtained from these Indian sailors, through the medium of a language with which they were not per-

and others of these eastern islands. These seem to be the chief; for besides them we saw also shock, curl-pated, New-Guinea Negroes; many of which are slaves to the others, but I think not all. . . . They have large boats and go over to New Guinea, where they get slaves, fine parrots, &c., which they carry to *Goram*."

* Their language, as appears from scanty specimens, is a dialect of the Polynesian, or general language of the eastern islands, of which the Malayan itself is a cultivated dialect.

† Captain Henry Wilson, in the East-India Company's packet-ship *Antelope*, was on the north-eastern coast of New Guinea, near Schouten's Island, about the time of the *Northumberland*'s accident on the north-western side. The country thereabouts he described to me as being remarkably populous. Upwards of fifty canoes came off to the ship, and many of the natives were allowed to come on board, who returned to the shore in a peaceable manner. By means of Captain Forrest's short Vocabulary of *Papūah* words (collected by him at Dory Harbour, but differing from those spoken at *Braou*), he managed to make himself pretty well understood. Upon the third day, however, they came off in such multitudes, and with an appearance so evidently hostile, that he found it necessary to repulse them with his small arms. Much had been previously said by them about a large ship, the purport of which he did not comprehend until his arrival in China, where he found the *Northumberland* and was informed of her disaster. The *Antelope* sailed from Canton in June, and in August 1783 was wrecked on one of the *Pelew* (*Pilū*) islands.

fectly acquainted. Whatever degree of importance may attach to it can be relative only to the very slight knowledge we have of the country or its inhabitants. There is reason to expect, however, that the cloud which has hung over it will ere long be dispelled, as we learn from the public Gazettes that directions were some years since given by the Government of the Netherlands for taking possession in the King's name of its western coast, and that accordingly a settlement was formed, in August 1828, at a river in lat. $3^{\circ} 42'$ S., nearly opposite to the North coast of New Holland; where the natives are represented to be not wholly uncivilised. From the known liberality of his Majesty's sentiments we have the strongest grounds to hope that, with a view to the extension of geographical knowledge, and in order to satisfy rational curiosity on a subject of general interest, publicity will from time to time be given to the circumstances attending the new establishment, and to the progress of discovery in a quarter that has not hitherto been scientifically explored.

V.—NOTICES OF CHINA, by PADRE SERRA.*—Communicated by J. F. DAVIS,
ESQ., M.R.A.S.

Read July 17, 1830.

No. 1.

Nomination of the present Emperor TAOU-KWANG in 1821.

IN China the Imperial dignity is not the certain inheritance of the Prince next in succession, but of him whom the deceased Monarch may have left named in a note, which is deposited in a casket: the reigning Prince having the power of preferring not only the younger sons to the eldest (though this should be the son of the Empress and those the children of concubines), but also his grandsons. Women have but little influence on this nomination in the present dynasty, but in some of the former they have exercised it so far as to promote a concubine to the dignity of Empress Mother, obliging the latter to abdication, or imprisonment.

The present Empress Mother is not the parent of the reigning Prince, though she has two sons who, at the death of their father, were more than twenty years of age. These are superior in personal appearance to the Emperor, who is thin and toothless, and the youngest of them is tolerably well educated; but the eldest is a drunkard. The second is also extremely immoral and fond of plays, for which purpose he entertains a number of young companions. Though the Emperor, their father, united in his own person all the vices of these his sons, he preferred his present Majesty for a successor, as being the most virtuous. Some, however, attribute this preference to the good conduct evinced by TAOU-KWANG in the rebellion

* Padre Serra was a Missionary of the College of San José de Macao, and Assistant in the Imperial Observatory, who resided in Peking from 1804 till 1827, during which period some matters of great secrecy were imparted to him by a Wang (*i. e.* a Regulus, or little king), his intimate friend.

of 1813,* when with an arquebuse he slew two or three of the rebels and intimidated the remainder, who had already penetrated within the precincts of the palace, for which he obtained due eulogies from his father in the public decrees.

The former Empress Mother, whose son now fills the throne, having expired in a paroxysm of rage caused by the present Empress Mother, who was then a concubine; the latter, on her elevation, ill-treated the prince, so far as to make him remain two hours prostrate, on one occasion, when, according to custom, he went in the morning to do her homage. These causes have, however, proved insufficient to prevent TAOU-KWANG, since he has ascended the throne, from continuing the customary ceremony, at first daily, and now every five days.

* On the 18th of October 1813, as the Emperor KEA-KING was about to enter Peking, on his return from a summer's excursion to *Jeho* (literally *Thermopylæ*, or "The Hot Springs"), a party of conspirators entered the Imperial palace, and kept possession of a part of it for some time. The first intimation of this occurrence was conveyed in the following Proclamation from the Emperor:—

"Proclamation—to announce a revolt which has taken place, and to inculcate myself.—Eighteen years have elapsed since, possessed of only inferior virtue, I looked up and received with profound veneration, the throne from my imperial father; after which I dared not resign myself to ease, or neglect the affairs of government. I had but just ascended the throne, when the sect of the *Pě-léen* (white-lily) seduced into a state of confusion four provinces, and the people suffered more than my feelings can bear to express. I ordered my generals to go against them, and after eight years' conflict reduced them to submission. I then hoped that with my children (the people) I should have enjoyed increasing pleasure and repose. On the sixth of the eighth moon (in 1813) the sect of *T'héen-le* (celestial reason), a band of vagabonds, suddenly created disturbance, and caused much injury, extending from the district of *Chang-yuen* in the province of Pe-che-lee, to the district of *Tsaou* in Shan-tong. I hastened to order WUN, the viceroy of Peking, to lead forth an army to exterminate them and restore peace. This affair, however, yet remained at the distance of a thousand *le* from the capital. But suddenly, on the fifteenth of the ninth moon, rebellion arose under my own arm. The calamity has sprung up in my own house. A banditti of upwards of seventy men, of the sect *T'héen-le*, violated the prohibited gate, and entered withinside: they wounded the guard, and rushed into the inner palace. Four rebels were seized and bound; three others ascended the wall with a flag. My imperial second son (the present Emperor) seized a matchlock and shot two of them; my nephew killed the third. For this deliverance I am indebted to the energies of my second son. The princes and chief officers of the Loong-tsoong gate led forth troops, and, after two days' and one night's severe exertion, completely routed the rebels." The paper goes on to cast the blame on his own remissness, and on the vices of his delegates; and to call for a general reformation.—J. F. D.

No. 2.

Successive gradation of the Princes of the Blood, and their corresponding incomes.

The Princes who are not exempt are required to frequent the schools, and when they are exempt they lose all title to the crown, and are made privileged Reguli, or nobles of the first class, excepting the youngest, who is of the second. This gradation descends with all one degree each generation, till having descended five generations they are made simple Princes of the House; calling themselves those of the *yellow-girdle*, which they are entitled to wear, as a distinction from the rest of the people, being privileged in all contentions therewith. From this degradation are excepted the eight families, and some others by especial favour, as it happened to a grandson of KIEN-LUNG, to whom he granted the first grade for ten lives.

A Regulus of the first rank receives annually from the Exchequer (besides his private establishment) 10,000 pieces,* 10,000 sacks of rice, and 360 servants. These are taken from the three tribes or divisions of families who live within the district of the Court, which is furnished with three parallel walls. They are paid by the Exchequer, and sixty of them are graduated of the third order (there are nine ranks among the Chinese gentry) and one of these is Steward of the Household, appointed by the Emperor, to whom he may prefer a complaint against the Regulus. In all, the expense to the State of a Regulus of the first rank is 60,000 or 70,000 pieces; of one of the second rank, half that sum; of one of the third rank, a third part of the same; and so on, down to the simple princes of the blood, who from their fifteenth year are allowed three pieces a-month and two sacks of rice. They are also allowed 100 pieces when they marry and 120 for a funeral; from which they take occasion to maltreat their wives, because when one dies they receive the allowance for her interment, and the dowry of the second wife, whom they take immediately.

The soldiery receive similar but less expensive aids, which are deducted from their pay. The Reguli occasionally hold certain offices, as that of Presidents of the Military Boards, but receive no other salary therefrom than what they extort by the sale of places, or inferior posts; by usurping the salaries of vacancies, especially in the Militia, or dispensing with the

* The value of the *taél*, the Portuguese coin, is 3s. 6d. The Chinese *taél* is 6s. 8d.

soldiers' exercise. This remark is equally applicable to all the great officers (principally Tartars), who only receive salaries from the principal office which they fill; and when they are punished by stoppage of the salary, this is not understood to withhold all the pay of their principal office, if their deficiency have not occurred therein, but only such part of it as corresponds to the office in which they have been deficient. Besides the salaries, all officers receive certain aids, which about the Court are moderate, but in the provinces far exceed the principal salary, and are never subject to fine.

No. 3.

Magistracy, and Administration of the Court and its District.

Chief Magistracy of the Court and the Palace. This, like all the other tribunals of the Court, is a Board composed of a President and six assessors. It has jurisdiction over the whole district and superintendants of the Court, and also governs the three tribes, of which we have already spoken; the eunuchs, who amount to about 5,000; the servants of the Court, who are estimated at the same number, and ten departments in the Palace, which are the following :—

First. The Master of the Horse and his assistants, who have charge of the imperial stables.

Second. The Superintendant of the Ornaments, who takes care of the boots, harness, and housings.

Third. The Superintendant of Woods and Forests, who looks after the lakes, rivers, and woods of the imperial district.

Fourth. The Keeper of the Wardrobe, who has the care of the head-dresses and tassels.

Fifth. The Criminal Judge, who tries the causes within the imperial district.

Sixth. The Chief Butler.

Seventh. The High Steward, who has charge of the imperial inheritances, with 360 bailiffs under him.

Eighth. The Superintendant of the letting of Crown Lands.

Ninth. The High Steward of the Household, who distributes pay and provisions to the officers of the Court.

Tenth. The Intendant of the Active Presents* of the Emperor.

* *Presentes activos*, in the Portuguese original.

Eleventh. The Guardian of the forty-eight Deposits of Passive Presents,* which office is filled by the principal eunuch, who is never above the fourth rank. This is an office confined within the precincts of the Palace, because the last dynasty was displaced by the surrender of one, who was also Intendant of Police.

No. 4.

Concubines and Servants of the Palace.

Every third year the Emperor takes a review of such of the daughters of Tartar officers and men of rank, as may have reached the age of twelve, (twenty years ago the daughters of all the Tartars living about the Court were reviewed), and from among these, of all whose families he is reputed the common father, he chooses wives or concubines. Those who are not chosen at the third review, become exempt. The servants, who amount to about 5,000, are chosen from the three tribes; the girls of fourteen present themselves at a review taken by the Emperor annually, and those who, after the third review remain unchosen, are exempt. Those who have been selected are restored to liberty when they have reached the twenty-fifth year of their age, unless the Emperor shall have had children by any of them, in which case he disposes of them as he pleases, making them illegal concubines; the legal, those acknowledged by the Observatory, being only seven. Hence the late Emperor, when congratulated by his father-in-law on the birth of a son (born of a servant), banished him with a nominal appointment. The present monarch refused to recall one of these servants who had been expelled with public disgrace when pregnant, through the jealousy of a favourite concubine, but at length, being apprized a second time by the magistrate that she had given birth to a son, he ordered her to be admitted into the Palace with her child.

No. 5.

The Customs and Revenue.

The most lucrative offices, as those of the Customs, are filled by persons selected from the three tribes within the Court district, among which there are some families of extraordinary wealth. The Canton Custom-house, in

* *Presentes passivos.*

particular, which is at the head of most of those in the country, is always governed by one of these. His duty is to pay into the Exchequer 1,470,000 taels, or ounces of silver, and to make three presents: one in the fifth moon, another on the birth-day of the Emperor, and a third at the end of the year, which amount to 800,000 pieces in value; consisting, principally of European articles. This mode of fixing the tribute is somewhat singular, it being according to an estimate made by the Judges. These and other tributes taken into the account, the revenue, according to the almanack, may be estimated at 150,000,000 of *cruzados** in specie and grain, of which latter 10,000 boat loads of 1,100 sacks in each are taken to Peking, and the rest is laid up in numerous granaries in the provinces, for the maintenance of the troops and succour of the people in the years of famine, which are very frequent in some parts of China. On such occasions the grain is distributed gratis, or sold at a small price; the Emperor also does not exact the land-tax when the scarcity is great. As there are years in which some officers represent that they must lose by the year being bad or the revenue poor, the Government takes the precaution of appointing, for such years, the persons who have served in the most productive. The officers of Chinese Customs are far less rigorous than those of Europe, being content to receive an oral or written testimony as to the goods transported, without opening chests or bales, unless when there is cause for suspecting a contraband traffic, which, in the interior of China, is very rare. As to the taxes, they conform themselves strictly to the instructions of the Exchequer at Peking, which are published with this view.

No. 6.

The Emperor KIA-KING, Father of the reigning Prince.

Daily, and without fail, he transacted the duties of his station; gave audience early in the morning—from which no Emperor excuses himself, unless by reason of serious illness—and, having despatched the business submitted to him, he retired to play on instruments and sing with his comedians; after which he drank to intoxication. In this state the remainder of the day was passed; and at night he proceeded with some of his

* The new *cruzado* in silver is worth 2s. 6d. According to this statement, the revenue of China would amount, in silver and grain, to only £18,750,000. I have given an account of the Almanack above referred to, and a detailed statement of the amount of the taxes, in the "Asiatic Journal" for 1817, pp. 333-4, 430-1.—W. H.

players, masked, to the seraglio. And the fact is not unworthy of remark, that his two younger sons bear not the slightest resemblance to each other in face or person: the one being tall and thin, the other short and fat. Such was the Emperor's attachment to players that, when he went to offer sacrifice in the temples of heaven, earth, and the sun, which he did in the evening, he took them with him. This, and other circumstances, being noticed by the celebrated Syndic and Minister, SUNG-KEUN, in a memorial, his Majesty was highly incensed, and ordered the offender to be summoned before him. On being asked if he was the author of this admonition, he firmly acknowledged that he was. He was then asked what punishment he deserved? and he answered, "Quartering." They told him to choose some other; whereupon he said, "Let me be beheaded;" and on a third command, he chose to be strangled. After these three answers, he was told to retire; and on the following day they appointed him Governor of E-le (the country of the banished): thus acknowledging his rectitude, though unable to bear his censure. Having been recalled to Court, and given fresh offence by his reproofs, he was degraded to the ranks of the watch; but was afterwards restored to his dignity by the present Emperor.

No. 7.

Of the Emperor YUNG CHING, and of the Lama Priests.

Though the succession to the throne depends on the arbitrary nomination of the reigning prince, that does not always prevent usurpations. An instance of this was seen in the succession of YUNG CHING to his father, the great KANG-HE. The prince nominated by him was the fourth; but this latter being in Tartary at the period of the Emperor's somewhat sudden demise, YUNG CHING, who was a privileged Regulus, entered the palace and seized the billet of nomination. Before the figure which he there found, he set a sign of *ten*, and thus made it appear that he, the fourteenth prince, was the one nominated. He possessed himself of the sceptre, and ordered his brother to be arrested and imprisoned, in a place which is standing to this day, four leagues to the north of Peking, and in which it is said that he died. There are offices and posts held by this Emperor, when Regulus, which are said to descend to the three tribes and divisions within the district of the Court. His palace has been converted into a pagoda, which is now inhabited by three hundred priests of Budha, who, within the

capital, besides others, have three principal pagodas, into whose chiefs the Tartars believe that the soul of the great Lama of Tibet has passed. There are many pagodas of Budha to the north of Peking and throughout all Tartary, all built and maintained by the public exchequer. One of the above-named chiefs, who is generally son of a Regulus, has further honours, and the revenue of a Regulus of the first class; all the others are paid, according to their rank, from the exchequer. All this is done for them because they retain in subjection the Tartars of the West, who consist of forty-eight principalities. Their respect for the priests is unaccountable, and thus it is that the latter, who go in June on a visitation to Tartary, on their return in October bring with them whatever the Tartars have of most value, especially cattle. It is said that the dynasty will pass to them; but the Chinese despise them exceedingly on account of their immorality, and of their being all, or nearly all, Tartars.



VI.—*Comparison of the Hindu and Theban Hercules, illustrated by an ancient Hindu Intaglio.*—By Lieut.-Colonel JAMES TOD, M.R.A.S., &c.*

Read December 4, 1830.

THE *intaglio*, of which the engraving is a *fac-simile*, represents BALADÉVA,† the Hercules of the Hindus, naked; the head encircled with a diadem, or fillet,‡ the ends flowing behind. His lion's hide (*Bágambra*)§ thrown

* In the possession of my friend, Thomas Perry, Esq., M.R.A.S., who, when judge and magistrate of Etawah and Mynpoori, purchased it from a person who said it came from Jeipoor.

† God (*déva*) of strength (*bala*).

‡ Notwithstanding the Rajpoots possess in the indigenous epithet *Pausha*, a word for this mark of kingly dignity seen on their most ancient medals (see vol. i. p. 313, T. R.A.S.), they now have recourse to the term of *báláband*—one of the numerous exotics adopted from their conquerors. The *báláband* of the Rajpoots is the *diadem* of the Greeks, both in application and interpretation: the one meaning *tied over*, the other *through* the head. The *báláband* is still the symbol of honour in Mewar, and was, in the days of her grandeur, held equal to any cordon in Christendom. It is of one or more cords of floss silk and gold thread, tied round the turban, the ends hanging behind the head.

Its estimation may be illustrated by an anecdote. When engaged in reconciling the long-alienated vassalage of Mewar to their Prince, accompanied by the ungracious duty of causing the surrender of their usurpation of the lands of the crown, the chieftain of Bednore “*of the sixteen*,” was one of the most impracticable, and his complaint was as much of the loss of dignity as of land, specifying the degradation of honours due only to his own grade, being conferred on those far beneath him. To my request that he would disregard them, and not let it interfere with the more important measure, I had the following dignified reproof:—“Disregard them! Why, for that simple thing (the *báláband*) round the turban, my ancestors deemed their blood a cheap purchase.” JAET SING was the descendant of JEIMUL, who defended *Cheetore* against AKBER, who held him “*when dead*,” in such honour, that he erected a statue to him at the gate of his palace at Agra, still there in Bernier's time; and he immortalized the matchlock with which he slew the Rajpoot, by leaving it as an heir-loom to his successor; which circumstance is mentioned in the Commentaries of his son, the Emperor Jehangír. There was no want of such chiefs as Jeimul in any Rajpoot principality. Let us respect their descendants, who yet retain, in spite of their altered condition, the magnanimity of better days.

§ From *Bág*, a lion or tiger, and *ambra*, covering.

over his right arm, extended ; on which is perched a figure presenting him a wreath, or coronet. In his left he grasps a club ; adjoining which is a *monogram*, composed of two letters, of an ancient and still undeciphered character, found on monumental rocks and pillars wherever the PÁNDÚS colonized. In various points of view, this gem will be considered a relic of more than ordinary curiosity.

First, As confirming the fact asserted by Arrian more than two thousand years ago, of the analogy in costume and attributes of the Hindu and Theban Hercules.

Second, The consequent confirmation of the antiquity of the existing martial mythology.

Third, As proving the antiquity of the art of engraving gems amongst the Hindus.

Fourth, For the antiquity of the characters forming the monogram ; and, *vice versâ*, the antiquity of the gem, from the use of this now incognate but once widely-disseminated character.

Arrian, when sketching the history of the family ruling on the Jumna, in Alexander's invasion, clearly indicates that he had access to the genealogies of the PÁNDÚ race, a branch of which ruled in these regions eight centuries subsequent to that memorable conflict, the *Mâhâbhârat*, which forms an era in the very dawn of Hindu history, and which, from astro-nomic and genealogical calculation, has been calculated about 1,100 years before Christ.* However briefly the Grecian historian touches on the history, genealogy, manners, or geography of the race ruling on the Jumna three centuries before Christ, there is sufficient to identify it, and, aided by the *intaglio*, to establish several singular analogies between the legends handed down by Arrian, and the sacred writings and traditions still current amongst the Hindus. The discussion may gratify curiosity, if not add much to our instruction.

There is no name so widely disseminated in the local traditions of India as that of *Pandú*. From the snowy Himâchil to Cape Comorin, every nation and tribe has some memorial to exhibit of this celebrated race. Yet although the name has been perpetuated through the lapse of ages, in the geographic nomenclature of the regions they inhabited ; although nations far remote and without intercourse possess monuments which they attribute

* Bentley: Asiatic Researches. Annals of Rajast'han, vol. i. p. 56.

to this race ; and although one peculiar character forms the inscriptions of all such monuments, still there are sceptics as to their existence, and who imagine the "*Great War*" as fabulous as the Trojan. For such there is no law of historic evidence, short of mathematical demonstration, that will suffice. The triumphal column of the *Yadus*,* at Delhi, mentioned by the bard Chand seven centuries ago ; that at Prága, the first seat of their power ; the Forum (*Châori*) of BHÍMA,† in the valley of *Mokundurra* ;‡ the caves of *Dhoomnar*, of *Nasuk*, and *Girnár*, with their various rock inscriptions ; the sepulchral monuments of *Pandú mandalam*§ in the Carnatic, and many other places, separated a thousand miles from each other, might in vain be appealed to.

It has been the fortune of the writer to wander over a great portion of the space sacred to *Pandú* traditional history, to have visited their monuments, to have discovered the sites of some of their ancient and long-forgotten cities,|| and their medals, to have copied numerous inscriptions attributed to them, and to have conversed with many of the *Tüar* tribe, who would deem it an insult to doubt their descent from this illustrious race : until the impression on his mind is, that the existence of the Etruscans or Assyrians might as well be doubted as that of the *Pandús*. But who, asks the sceptic, were these *Pandús*, who possessed in *Baladéva* a chieftain with the attributes of Hercules ?

The traditions of the Hindus assert, that India was colonized by a race called *Yadu*,¶ to which they trace the foundation of the most conspicuous of their ancient cities.

* *Pandú* is a great branch of the *Yadú* race, having *Búdha* as its patriarch.

† One of the *Pandú* leaders ; an engraving of this, the most ancient fragment of architecture I have seen, is engraved for the second volume of the "*Annals of Rajast'han*."

‡ The Pass (*durra*, or *dwarra*) of *Mokund*, an epithet of *Heri*.

§ The "*Pandionis Regio*" of Ptolemy, having *Madura* as a capital, which yields conviction that the *Pandús* colonized this region, and gave the name of their old seat of power, *Mathūra* on the Jumna, to the new settlement. It is my intention to enter more fully on this subject hereafter in a paper "*On the Sepulchral Monuments of the Rajpoots*," which will furnish another link in the chain of evidence of the Scythic origin of some of these.

|| Arore on the Indus, and *Súrapúra*, capital of the *Súrasení* (of Arrian) on the Jumna.

¶ For a sketch of this race see *History of the Tribes*, "*Annals of Rajast'han*," vol. i. p. 85. The *Yadus* are in the unpolished dialect pronounced *Jadú* or *Jadoon*. Strange to say, a branch

Hasti, the twenty-sixth in descent from *Pooru*, son of *Ydyāti*, founded Hastinapoor, on the Ganges, long the capital of Upper India; and although not mentioned by name in any of the Greek writers, was probably the regal abode of the *Porus** who opposed Alexander. From *Hasti* issued several tribes, of which the *Cúrús* and *Pándús* were the most distinguished; while from *Yadu*, elder brother of *Pooru*, issued the *Herícúla*, or "race of Heri," who erected the cities of *Súrpoora*, *Mathúrá*, and *Baldévà*, on the Jumna.†

It is not my intention to seize upon the curious nominal similitude of which Arrian was probably ignorant when he started the hypothesis more than 2,000 years ago, of the identity of the Hercules of Thebes and of the Jumna, though the "delight of Juno" (*Herakles*) might be proud of his descent from the Indo-Scythic *Herícúla*.

Let us place what the Greek writers have said on this subject in juxtaposition with the legends of the Jains and Poorans, and then comment thereon.

of that extensive *Oolooss* of the Ghilji nation, the *Eusofzyes*, or "tribe of Joseph," is called *Jadoons*, and their original seats about *Guzni*, a city claimed by the *Yadus* as founded by Raja Guj long anterior to the era of Vicrama. See "Elphinstone's Cabul," vol. i. for mention of the *Jadoons*.

* *Pooru* continued to be the patronymic of the *Yadú* race until the more distinguished name of *Cúrú* took the lead, who, to maintain their pre-eminence, contested by the sons of *Pandu*, another celebrated chief, caused that civil strife, termed the *Máhábhárat*, which ended in their dispersion. The appellation *Porus*, which distinguished more than one of the kings of Northern India, during the Macedonian invasion, originated from the *Poori* of *Yadú* race.

† *Prága*, the modern Allahabad, at the confluence of the Jumna and Ganges, was established even before Hastinapoor, and is considered as the very cradle of the race of *Pooru*, whence its name *Porága*, abbreviated to *Prága*, the city of the *Prasii* of Megasthenes. The traditional couplets of the Rajpoot races, embodied in their old genealogical histories, are the most valuable relics of the past. One of these thus gives the foundation of the old *Yadu* colonies:—

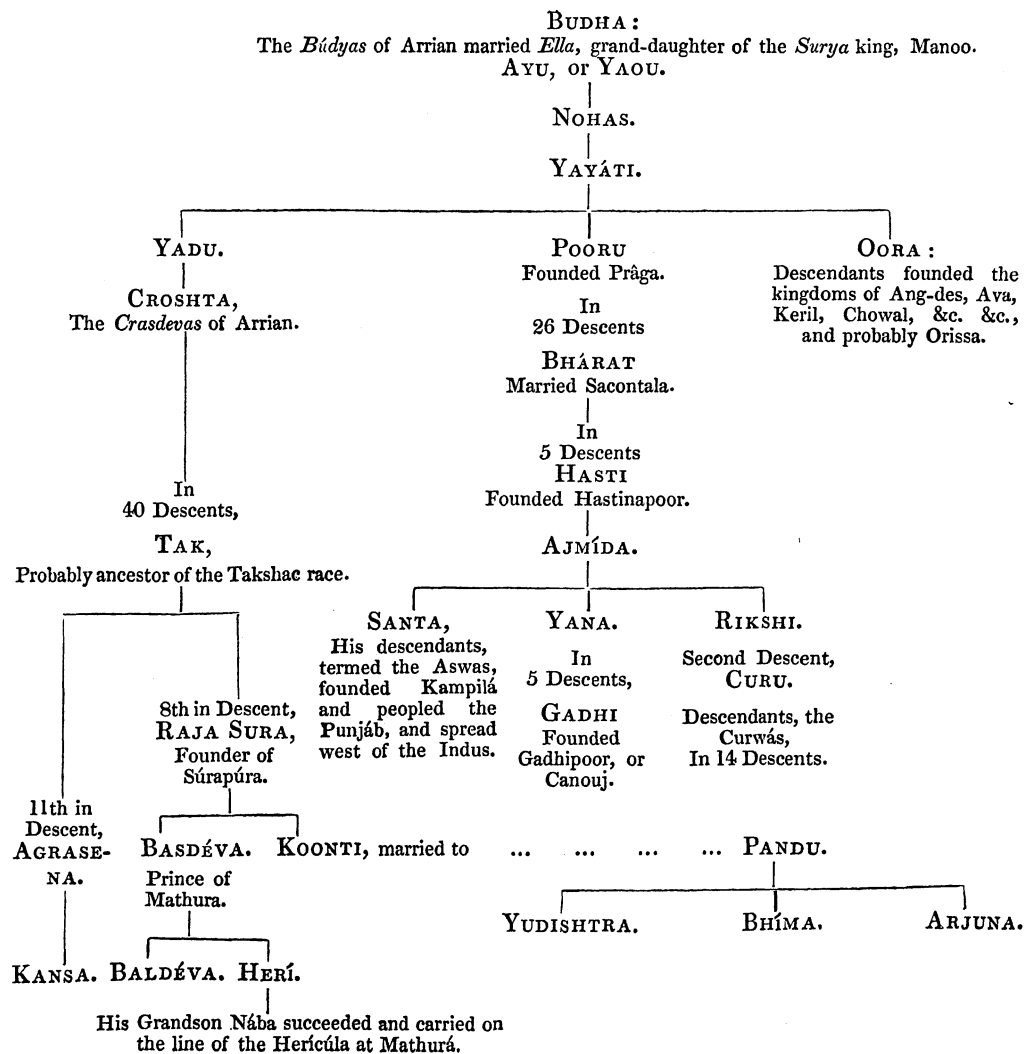
" Ad *Prága* o'thanna
Doótyá *Mathúrápoori*
Dwarica Raj-nát'h aya
Chaotur-túnha *Marúst'hali*."

I would suggest the probability, that the disputed *Palibothra* should be *Pooripútra*; i. e. the city inhabited by "The children (*pútrá*) of *Poorú*." It is not uncommon thus to name colonies, ex. gr. the little state of *Bhawulpore*, east of the confluent arms of the Indus, is called "*Daod-*

Arrian, chap. vii. Indian History :—" The whole country of India is
 " divided into 122 nations, according to Megasthenes. Like the Scythians,
 " the Indians were anciently a wandering race, tilled no lands, had neither
 " towns, houses, or temples; clothed themselves in the skins of wild beasts,
 " ate of the fruit of the TALA, a palm tree, and the beasts of chace, before

pootra," the race of Daôd (David) the founder. There is no other position than Prága that answers to Palibothra, the capital of the *Prasii*, to whom Megasthenes was sent as ambassador from Seleucus.

INDU-VANSA, according to the Pooráns.



“ Bacchus or Triptolemus made a conquest of them ; who built them cities,
 “ gave them laws, taught them agriculture, the use of wine, as he had the
 “ Greeks, and to yoke their oxen to the plough. He also instructed them
 “ in military discipline, the worship of the gods to be performed with drums
 “ and cymbals, and introduced the satyric dance, and to suffer their hair
 “ to grow.”

The whole of this relation is in perfect accordance with the traditional cosmography of the Jains or Budhists of India. Their *Adnat'h*, or *Búdha*, the patriarch of the Yadu race, is the counterpart of this Bacchus, or Triptolemus, whom they bring from central Asia, to espouse Ella, daughter of Súrya, and sister of *Manu*, or *Menes*, the first sovereign of India. Some of the laws of Triptolemus, the first lawgiver of Greece, have a remarkable affinity to those of the Jains, especially that first commandment common to both—“ Thou shalt kill no living thing.” The Jains say this Adnath taught every art enumerated by Arrian, “ even to muzzling the ox, and treading out the corn ;” though the orgies of the agricultural divinity, Bacchus, the satyric dance with drum and cymbal, rather appertain to the *Ad-iswar* of the *Sivites*, whose rites are thus administered.*

Chap. viii.—“ When Bacchus was about to leave the country, he appointed Spartembas to govern, who dying was succeeded by BUDYAS (Βούδας) ; he by CRASDEVAS (Κρασδεύας) ; and so in succession, from father to son. The Hercules who penetrated so far, the Indians tell us, was a native of their country. He is particularly worshipped by the SURASÉNÍ, who have two great cities, METHORAS (Μεθορά), and CLEISOBORUS (Κλεισοβόρα), and the navigable river JOBARES (Ιωβάρης), passes through their territories. This Hercules, as Megasthenes asserts, and the Indians themselves assure us, uses the same habit with the Theban Hercules.”

Here we have *Búdha*, the progenitor of the whole *Indu* or *Yadu* race, and in *Crasdevas*, the *Croshta*, or *Croshtdeva*, the branch from which the *Hericulas* are descended. *Baldeva*, whose effigies are on the gem before us, is the Hindu Hercules ; his name signifying the god (*Déva*) of strength (*bala*). The city sacred to him, and called after him *Baldeva* (fam. *Buldeo*), is in the very heart of the *Súrasení*, and there he continues to receive worship, as in the days of Alexander, and ages anterior. This town is therefore the *Heraclea*, as he is the Hercules of the *Súrasení*.

* There is little doubt that these sects closely approximated at the most remote periods.

The two chief cities of the Súraséni, Methoras and Cleisoboras, are *Mathúra* and *Súrapoora*, and the river "Jobares passing through their territory," the Yamuna or Jumna.

The Súraséni derive their name from *Súraséna** (founder of *Súrapúra*), the common ancestor of Heri (chief of *Mathúra*) and Baldéva. A wreck of *Súrapúra* yet exists about fifty miles below Mathura, placed like it, on the Jumna, and must have been known to the Greeks, and probably claimed precedence of Methoras: Cleisoboras must, therefore, be an adulterated orthography. According to the traditional topography of the Hindus, the land of the *Súraséni*, or the pastoral region of *Vraja*, extended about one hundred miles around Mathúra as a centre, comprehending *Gwalior* and all *Yaduwati*† on the south, from the Chumbull to the Sinde.‡ This region was famed for

* There are two princes of this name in the Yadu genealogies: one, the grandfather; the other, nine generations anterior to Heri and Baladeva. We must remain in ignorance which of these founded *Súrapúra*. See genealogical table of these races, p. 32, vol. i., *Annals of Rajast'han*.

† This wild region continues to be held throughout the vicissitudes of ages, by chieftains of the Yadu race, of which the Rao's of Karowli and *Sri Mathúra* are the heads. With Rao Manohur Sing, of the latter place, I was on terms of real friendship, from my subaltern days to the period of quitting India. It was from him I had the first transcript of the genealogy of his ancestors, and the copy of the *Mahabharata* that I presented to the Society (which Professor Bopp of Berlin pronounced the best he had seen), was transcribed for me from an antique copy in the possession of this representative of the race whose history it develops.

In hunting with the Yadu Rao, who is one of the most courteous and well-bred men I ever knew, I was instructed in the mode of throwing a light javelin, or dart, at objects from the horse while at speed. This dart is about twice the size of a common arrow, and like it, feathered; and previous to launching it, it is twirled three or four times at arm's length, holding it by the feathered end, and is thrown with wonderful precision, not unfrequently hitting crows as they fly past. Although I never absolutely knocked one down, I have made them have recourse to all their cunning to avoid the dart. In no other part of India did I ever see this amusement, which is perhaps a wreck of their old Scythic manners.

This descendant of Hercules was wofully cast down, when, in the *arrondissement* of territory which followed the battles of Assye and Dehli, in 1803-4, he was placed under the Jaut, or Jit (ci-devant Prince of Gohud), as his *suzerain*,—a feeling, ignorant as we are of their past history and associations, which many cannot enter into. *Imagine a scion of the Plantagenets holding from a clod-pole?*

‡ *Sinde*. Besides the Sinde or Indus, we have two rivers with this appellation in Central India, one (that in question) rising at Latouti on the table-land near Seronge, and falling into the Chumbull at its junction with the Jumna, forms that sacred spot *Triveni*, where there is a shrine to *Siva*. The *Choota*, or Little Sinde, rises in the table-land forming the buttress of Malwa, skirting the Nerbudda, and joins the Par. Thus the Indo-Scythic or Tatar term *Sin* or

the purity of its dialect, and in arms, as well as in arts, even in the days of the legislator Menu, who enjoins that "the van in battle"* should be assigned to the soldiers of *Suraséni*. Baldeva has, therefore, a legitimate right to have his city amidst such a people. There he is still enshrined, and covered with his lion's hide and armed with his club, his fane attracts the martial pilgrim from all parts of India after a lapse of 3,000 years. Had Arrian left us his indigenous epithet, or that of his race (*Hericúla*), or of this his city amongst the *Suraséni*, we should have judged how far *nominal* resemblance had aided his (Arrian's) hypothesis regarding the analogy of the deified heroes of the Greeks and Yadus.

Arrian continues, chap. viii. "He, Hercules, had a daughter, when advanced in years, and being unable to find a husband worthy of her, he married her himself, that he might supply the throne of India with monarchs. Her name was *Pandea*, and he caused the whole province in which she was born to receive its name from her."

Diodorus repeats the legend with little variation, both taken from the journal of Megasthenes, now lost :—

"Hercules was born amongst the Indians, and like the Greeks, they furnish him with a club and lion's hide. In strength† he excelled all men, and cleared the sea and land of monsters and wild beasts. He had many sons, but only one daughter. He built Palibothra, and divided his kingdom amongst his sons. They never colonized, but in time most of the cities assumed a democratical form of government, though some were monarchical till Alexander's time."

On this curious fragment of the biography of the *Hericúlas*, Arrian, though generally blamed for not exercising a sound judgment, both indulges his humour and incredulity; yet, by the retention of an apparently idle anecdote, 800 years old in Alexander's time, we are enabled to trace an historical fact, however distorted, which has floated through twenty-one subsequent centuries with little variation, proving beyond a doubt, that the Macedonian *savans* had consulted the Hindu legendary histories in which it is thus related.

river, extends far east of the '*Abba-Sin*' (Father Stream) or Indus, which is only known by this name high up. Below Ootch, it is termed the '*Meeta Murán*,' or Sweet River; also an Indo-Sythic term.

* Menu "On the Military Class," chap. vii. p. 217: Haughton's Edition.

† "In strength" *bala*, whence his epithet *Baladeva* "God of Strength."

Vichitra, son and successor of *Santana*, sovereign of Hastinapoor, had no male issue. He had two legitimate and one illegitimate daughters. Of the first, one from her colour was named *Pandea*. *Vyasu*,* their *Gūrū*, or *spiritual father*, the sole male of the house of *Santana*, took this niece, his *spiritual daughter Pandea*, to wife. She bore him *Pandū*, who succeeded to the sovereignty of Northern India, and which from that time has been designated the *Pandūan Raj*, or kingdom of the Pandus.

Thus the identity of Arrian's relation with existing tradition is maintained throughout, even to *Pandea*, daughter of the *Herícula* king, giving her name to "the province in which she was born."† By a slight sketch of the issue of *PANDEA*, we can fill up the picture of similitude drawn by Diodorus on the achievements of the Hercules of the Yadus, who, "in strength (*bala*) excelled all men, and cleared the sea and land of monsters and wild beasts."

Pandū, son of *Pandea*, married *Koontí*, sister of *Basdeva*, prince of *Mathurá*,‡ the father of *Heri* and *Baldeva*. But, "for the sins of their ancestors, sterility was the doom of the wife of *Pandu*, until, "by means of a charm," she enticed the celestials to her bed. By *Dhermaraj* (*Minos*) she had *Yudishtra*; by *Pavan* (*Eolus*) she had *Bhíma*; by *Indra* (*Jupiter Cælus*) she had *Arjuna*; and *Nycula* and *Sydeva* owed their existence to *Aswiní-Komara*, the Hindu *Esculapius*.

These are the "*Five Pandus*" whose exploits fill the traditional history of India, and, though a mixture of truth and fiction, must not be rejected.

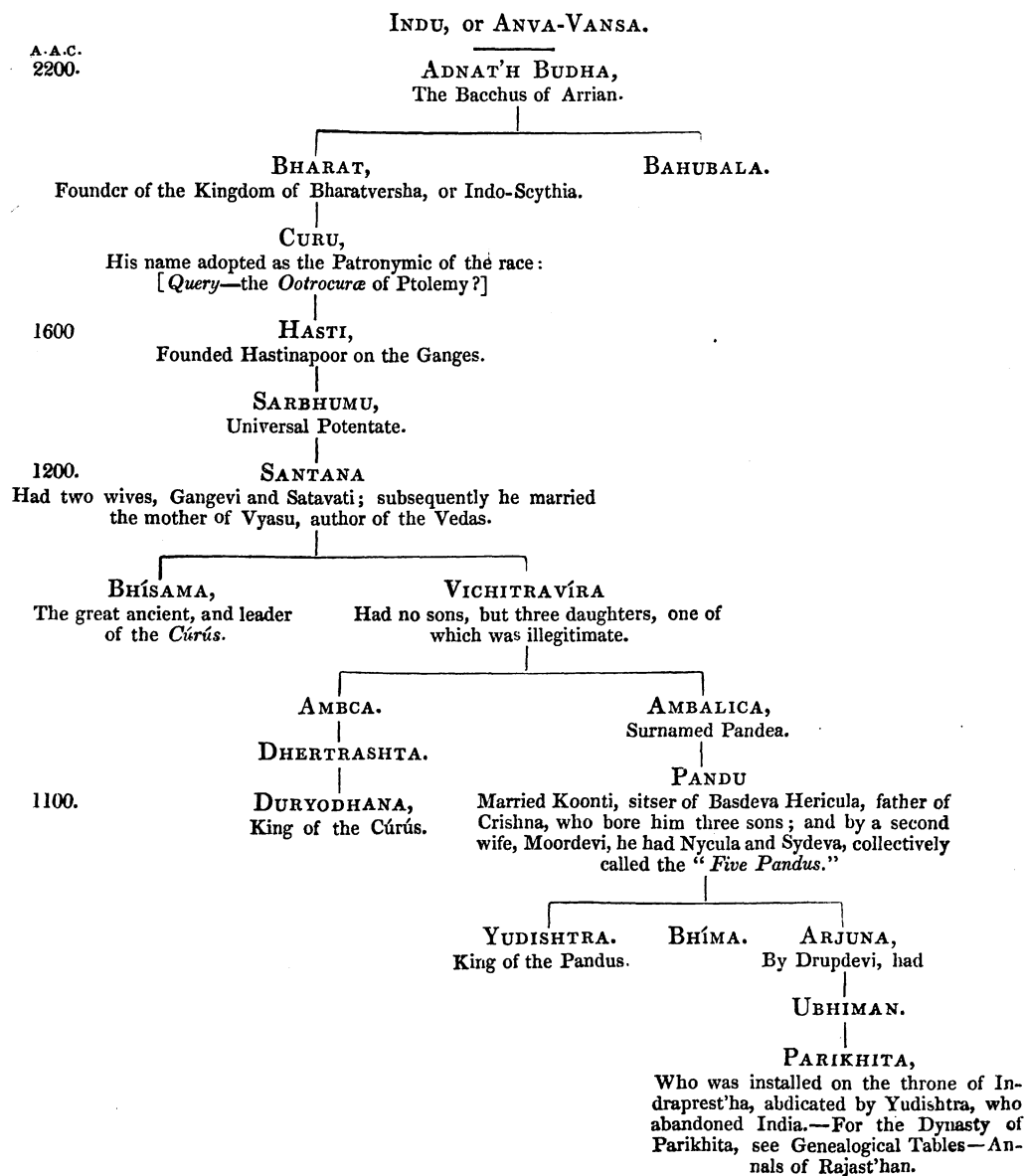
* *Vyasu*, author or compiler of the Vedas, was the son of King *Santana* by *Yojnaganda*, a fisherman's daughter. She was '*la belle Battelière*' of the *Jumna*, and in ferrying over the *Herícula* king, proved he was no saint, though he begat one. It is doubtful whether this humble mother of the first name in Hindu literature, and parent to its proudest kings, did not become the legitimate wife of the king. Her epithet of *Yojna-ganda*, or the "*Fragrant*," imports one "the aroma of whose frame extends for a *yojna*," or four miles.

† A section of the *Māhābhārata* is devoted to an account of the *Herícula* or *Herivansa*, and from some extracts I had made, it is made to appear that this race came from Southern India, but these were too superficial to permit me to give any opinion on the subject. We can have little doubt that the *Pandumandalam* of the Carnatic, the *Regio Pandionis* of Ptolemy, with its capital *Madúra*, was colonized by the Pandus from *Mathura*. The pastoral region of *Heriáná*, between the *Jumna* and the *Sutlej*, was likewise named from a colony of the *Herícula*.

‡ They were of the same stock, and what we term first cousins: a degree of propinquity termed incestuous by the Hindus. And another among the many proofs that this race was foreign, or Scythic, is, that the canons regulating the degrees of matrimonial affinities had not then been promulgated.

The fictitious portion of it was evidently invented to cover some paramount disgrace in the Yadu family, in the debasement of this branch thereof.*

* The Jains or Budhists reject the fabulous portion of this genealogy, and assert that Pandú had two wives: by *Koonti* of the *Heriçula* race he had three sons; and by *Moordévi* two, making the "Five Pandus:"—



.. *Note.*—These are only the conspicuous princes of a long line.

Ambca, the elder sister of *Pandea*, bore (also by *Vyasu*) *Dhertrashtra*, who had a son, *Duryodhana*. This branch of the *Yadus* assumed the surname of *Cúru*, from a celebrated ancestor. On *Pandu*'s death, *Duryodhana*, (in consequence of his father's incapacity from blindness) assumed the rod (*charri**) of empire, proclaiming the illegitimacy of the "Five *Pandus*." Intestine broils followed, and the brothers were proscribed during the term of twelve years. Accompanied by their *Heracula* brethren, *Heri* and *Baldéva*, they perambulated every part of India, leaving these monuments still ascribed to them. The deeds of valour performed in these wanderings are still the theme of local tradition, and would afford no mean parallel to the exploits of the *Hercules* of the west, though it would be difficult to separate the actions of the *Pandus* of *Hastinapoor*, or their *Súrasénic* relations, *Baldéva* and *Heri*.

Expelled from *Hastinapoor* they retired to the north, and on their arrival at *Kampila*, the capital of *Drúpdeva*, king of *Panchalica*, found assembled the chivalry of India, suitors for the hand of his daughter *Drúpdevi*. In those primitive days beauty became the prize of valour, and *Arjuna*'s skill in the bow obtained the meed; but as she sealed her choice by throwing round his neck the *burmala*, or marriage-garland, she drew upon the exile the undissembled wrath of the disappointed lovers. *Arjuna*'s bow, however, again proved victorious, and they expiated their rancour with their blood. "The princess of *Panchalica* became the wife in common of the five brothers."

The king of *Kampila* † was of the same original *Yadu* stock; his race

* The Imperial Rod or "*Charri*" is a long staff or javelin, and is often placed on the *royal cushion* or throne. The allusion to it in colloquial discourse is common. *Charri myn zoor hyn*, "His rod is strong."

† It is important to remark, that Ambassadors from the King of *Kampila* were sent to the Emperor *CHAO* in A.D. 408. The Chinese historians call it *Kia-pi-li*, and say that his name was *YUE-GNAI*, who was of the religion of *Fo*!!! Either his name is intended as *Agni-pala*, or that of his race, *Agni-cúla* which was essentially Buddhist.

The communication from all parts of India, at this period, with all the princes of the dynasty of *Sum*, proves it to have been founded on a community of religious sentiment. The kingdom of *Po-li*, which sent ambassadors to *Fi-HOAM-ti* about fifty years after the first, was in all probability one of the *Páli* kings of Central-India, about the *Betwá* River. *Kiu-to* (*Cheetore*?) represented in the very heart of India, sent ambassadors in 516, when *Cosmos* was in India. But the most tangible of all is the embassy sent in A.D. 641 to Emperor *Tai-tsong*, from a king named *Hou-lo-mien*, his country *Makito* or *Mokiato*, in the heart of India, whose capital was *Cha-po-ho*.

was *Aswa*, probably the *Asi*, one of the four Scythic tribes inhabiting Central-Asia, mentioned by Strabo as having, in conjunction with the Tochari, &c. (*Turshka*), overturned the Bactrian empire.* That he was Indo-Scythic, this instance of admitted polyandrisms would alone go far to prove. Nor is it improbable that the Pandus were the offspring of a Scythic prince of this region to which they migrated, who obtained the favours of Pandeia, and that the story of their birth was fabricated to hide the disgrace.

They returned with their bride to Hastinapoor, and with the aid of the priesthood and concurrence of the blind king Dhertrashtra, a partition of dominion took place, when Yudishtra, the elder Pandu, was enthroned in Indraput,† which henceforth eclipsed the more ancient capital Hastinapoor. But the contests for supremacy were soon renewed, and the brothers again declared outlaws by their uncompromising and vindictive relation. They soon travelled to the south, and were long indebted to the deep forests of *Virát* and *Herimbá*, for security, suffering every privation and encountering manifold dangers from the savage beasts and no less savage men who peopled these wilds. The remembrance of these varied adventures is yet cherished in these intricate and interesting regions, through which I have traced their wanderings, and listened with delight to the recital of their adventures; to that of Bhíma with the giant daughter of Herimba, or the exploit of Heri with the demon of Toolisham.‡ I have

lo-tching, doubtless Pooliman, king of *Magadha*, or Behar, his capital, *Champapoori*. He also the same year received ambassadors from the king of *Outcha*. This is *Ootch* at the *furca* of the *Punjnad*, or confluent five rivers forming the Indus. From *Cosmos* we learn that an Indo-Scythic king of Hun race then ruled on the Indus. I have often intended to analyse those chapters of De Guignes, containing the account of the missions from India to China at this remote period, having perhaps had better opportunities of studying the Geography of northern India than many others, but I have so much varied material that I must be satisfied to throw out these hints for others to pursue; satisfied it is worth the labour, as an aid to Hindu chronology. “On the Dynasties of *Sum*, *Leam*, and *Tam*.”—Hist. Gen. des Huns, tom. i.

* A colony of this *Asi*, I have surmised in a preceding paper, may have colonized Scandinavia and founded Asgard: the region (*gar*) of the *Asi*. Thither the *Gete* had preceded; hence the mythological similitude exhibited in the martial poetry of the Rajpoot bards, and the Scalds of the North; besides the resemblance of the *Runes* and old Pali of these *Pastoral* tribes.

† Its name of Dehli is modern, having been given in the eighth century, by the *Tuars*, descended from the Pandus, who refounded it.

‡ Heri's slaughter of the Hydra of Yamuna and rescuing the Vedas, or Science, from the same foe in the Gulph of Cutch, form a parallel to, and might be the original of Hercules strangling the serpent, and the adventure of the Pythian Apollo.

gazed with interest on the refreshing cascade issuing from a fissure of the bleak rock rent by the club of Baldeva to assuage the thirst of the mother of the Pandus ; and partaken of the sorrow of the narrator as, seated on the margin of the lotos fountain,* he related, on the spot where it happened, the martyrdom of Heri by the forester Bhíl. With this guide and votary of the deity of the Yamuna I have made pilgrimage to the *tumulus* where his ashes were deposited, and mingled my resentment with his as he marked the shrine of an Islamite saint in contaminating contiguity with that of the lover of Radha. With him I have allowed my imagination to carry me back three thousand years, and as he pointed out the mountain at whose base the mild yet manly Arjuna, conqueror of the suitors of *Panchalica*, was despoiled of his victorious bow by the Bhíl, have pondered with a lively interest on the vicissitudes of their fortunes. These are the scenes which excite the Hindu, whether the proud Rajpoot, the humble peasant, or man of wealth ; and you must see them and converse with them under the influence of such impressions, to understand the moral effect upon their lives and character.

It would be out of place to detail the lengthened adventures of the Herculuses of the Rajpoots, but there is one incident so characteristic, and out of which has sprung one of the most distinguished architectural decorations, that its insertion here may be deemed not inadmissible. If Vitruvius attributes those graceful supporters of entablatures to the damsels of Caria, we may ascribe their counterpart to the Pandus at a period still more remote ; though the HINDU *Gutachuc* possesses neither the euphony or grace of the Grecian *Caryatidæ*.

Gutachuc was the son of the forest king of Herimba, and as his sister became enamoured of the valiant Bhíma, so he transferred his affections to the beauteous Drúpdevi, the common spouse of the exiled brothers. Although necessity had compelled Bhíma not to repudiate the advances of the gigantic daughter of Herimba, he was determined even to risk the forfeiture of the sanctuary they enjoyed, to punish this revolting proposal. Drúpdevi was instructed to consent and to name the temple as the place of assignation. Overjoyed at his success he failed not in punctuality, but as his audacious hand was raised to remove the veil from her face, the nervous arm of Bhíma rent the supporting column of the temple. To save himself

* *Comala-coonda.*

and the fair object of his passion from being crushed under the impending ruin, he strained his gigantic force, and supported the fabric on his shoulders, till he was released by the attendant protectors of the fair. To commemorate the infamy of the forester, who thus violated the laws of sanctuary (*sirna*) and hospitality, the *Silpīs* or architects have "*par ordonnance*" adopted this relation in all sacred edifices, where a diminutive and grotesque figure of *Gutachuc*, with arms and legs extended under him, the head stooping and face distorted, as from a sense of oppression, ornaments the capitals of columns which support entablatures.*

The meritorious conduct of the valorous band, the services they performed in return for the protection afforded them in the various countries they perambulated, obtained them abundant auxiliaries; and having completed the term of their banishment, they emerged from their retreats, and returning to the "*Sable Yamuna*,"† demanded to participate in their

* Those who wish to see a representation of *Gutachuc* may be gratified, in examining that fine composition in the last number of Captain Grindlay's "Scenery, &c. of Western India;" a work which evinces his love for the arts, in preserving from the universal destroyer some of the finest specimens of Hindu and Mahomedan art yet existing. The site of the edifice whence these columns were delineated is in the very heart of the scenes we describe. To judge of the uniformity of this emblematic *Gutachuc*, I may draw the reader's attention to similar columns of great antiquity in the ruins of Chandravati. (See *Annals of Rajast'han*, vol. i. p. 574.)

The curious in old Saxon or Gothic architecture have only to look at those grotesque embellishments of columns for the representations of *Gutachuc*, not the only ornament common to the old temples of the Getic races of Europe, and the Indo-Scythic races of the East. Those specimens of tortuous imagination which decorate the oldest European churches, as Falaise in Normandy, Moissac in Languedoc, Poitiers, and many others in France; of Monza and Padua in Italy; of the German churches, where what is called the "*style Byzantin*" prevails; and our own Saxon monuments of England, might be transferred to some of the ancient Hindu temples without violation of uniformity.

The term *Gothic* is by no means misapplied, confined to the *decorations* of this style of architecture, and obtaining in all these edifices at the period the Gothic races simultaneously overran Europe, indicates some original source (*ex. gr.* Pali temple of Ajmere, *Annals of Rajast'han*). To the kingdom of Vizigoths, or Eastern Getes, from the Ebro to the Loire, of which Toulouse was the capital, may be ascribed the Asiatic character of the sculptures observed in some of these temples; while to the same Getic race, whether Kimbri, Longobardi or Saxon, may be assigned those of Normandy, Northern Italy, and England. Hence the term Gothic means the corruption of the purer Roman style, by the incorporation not so much of the principles of Getic architectural art, as the super addition of their barbarous mythological decorations.

† The Yamuna is named after the sister of the Hindu Pluto, *Yama*. Hence its funereal qualities. It is also called Kali-nadi, the "*black river*," the Kalindi of the Greeks, and contracted to "*Kali-dé*"

“*Báptá*,”* or birth-right. But Duryodhana received them with scorn, though they limited their demands to the “*panch-Patī's*,” or five townships of Indraput, Paniput, Soniput, &c.† In the full pride of possession, their relative, spurning all compromise, contemptuously replied, “they should not have so much of the soil, his sovereignty, as would cover the point of a needle.” Left without alternative, they determined to conquer what injustice denied them.

The extensive plains of the Caggar, or Sarasvati, were fixed upon to decide the claims to supremacy of the rival clans, the *Cúrús* and *Pandús*, and there the auxiliary bands of the “fifty-six Yadú tribes,”‡ (“*chapun cūla Yáddú*,”) gathered from the most remote regions to espouse either cause in this great conflict. The theme has alike secured immortality to the bard and to the actors in that exterminating day, and the martial Rajput, who yet continues his pilgrimage to *Cúrú-khéta*, feels sanctified in only beholding this the Troad of India, on which Fame has erected her temple. Hither her votaries have crowded for ages,§ ready, like the Yadu warrior,

“To sail in tempests down the stream of life,”

in order to have their names recorded on the pedestal of the “Great idol of mankind:” around whose statue their mental vision portrays in all the honours of apotheosis, the just YUDISHTRA, the warlike BHÍMA, and, resting on his club the mighty BALDEVA; while seated in their war chariot, between the rival hosts, HERI and ARJUNA discourse on the horrors of civil dissension.||

the *black pool*, in which the infant Heri slew his hydra foe; the Python of the Greeks and Typhon of the Egyptians.

* *Báptá*, “patrimony,” from *Báp*, “father.”

† This tradition establishes the antiquity of those towns yet existing. Were people to be stationed there during the rainy season, I have no doubt coins and other memoria of the *Panduas* would be abundantly discovered. It was thus I obtained hundreds, nay, thousands of coins and medals from the ancient cities of Mathura, Surpura, Oojein, &c. &c.

‡ The “gathering” of the *Cúrús* and *Pandus*, however exaggerated by the Bards, must have been a very stirring scene. It is detailed at length, the clans, the leaders, and their actions, in the great work. The pick-axe, applied to the *Cúrú-khéta*, might yet yield something for the antiquarian.

§ Here MAHMOUD of Ghizni and SHAHBUDIN were defeated; and here the last struggle for Hindu independence was maintained to the death by the Chohan Emperor PIRT'HIRAJ, SAMARSI of Cheetore, and many a noble Rajpút.

|| Thanks to the venerable translator yet amongst us, we are enabled to appreciate this episode

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X

Though ages of oppression have shaded the virtues of the Rajpút, and dimmed his moral perceptions, he has lost none of his veneration for these stirring scenes, or the recital of the doctrines which form his rules of conduct, and whose application in the ordinary intercourse of life renders his discourse more emphatic.

But to return to the immediate object of research—our Hindu Hercules : Arrian says, that one of the tribes of the Punjáb was “ called *Sobii*, that they wore the skins of wild beasts, were armed with clubs, and marked their oxen with its impress, for the reason that they were a colony left there by Hercules, and in commemoration of him :” on this and other information furnished to him by Megasthenes, he remarks :—

“ This was not the Theban, nor the Tyrian, nor the Egyptian Hercules, but some great king whose dominions lay not far distant from India.” May we not conjecture the Hericúla descendant of BALDEVA? Arrian adds, that this tribe, the *Sobii*, carried the effigies of Hercules (BALDEVA) on their banners; that is, the identical figure which has prompted this disquisition. Moreover, I think this club-bearing nation† is not yet extinct, and that the *Chobi* votaries who yet fill the temples of HERI and BALDEVA in Súrasená are the very people.‡

Whoever has witnessed the annual commemoration of HERI's recovery of his birthright, would have little doubt that the *Chobis* of Mathurá were the *Sobii* of Arrian. The festival concludes with the storming of the castle of Kansa, in which these sturdy, well-fed, church-militant *Chobis* mount the breach, each armed with a long club, tipped with iron rings, with which

of the Iliad of the Hindus, which the celebrated Hastings pronounces to possess “ a sublimity of conception and diction almost unequalled ;” and the version of Dr. Wilkins he “ fears not to compare with the best prose versions of the Iliad or Odyssey.”

Take for instance CRISHNA's description of the immortality of the soul, in the dialogue with ARJUNA, when he incites his courage “ to throw off the old garment ” in that day's battle :—“ The weapon divideth it not, the fire burneth it not, the water corrupteth it not, the wind drieth it not away ; for it is indivisible, inconsumable, incorruptible, and is not to be dried away ; it is eternal, universal, permanent, immovable ; it is invisible, inconceivable, and unalterable.”—*Bhagvat Gíta*.

† According to the various classical authorities, borrowing from Megasthenes, every tribe is made a nation, and every town (*poora*) a city (*polis*).

‡ The permutation of *ch* for *s* is common. The people of the South always pronounce *ch* as *s* ; *ex. gr.* in no meaner name than the notorious Pindarri leader CHEETOO, the SEETOO of the Southron.

they forthwith demolish, amidst tumultuous yells of applause from a multitude of spectators, the mimic fortress of the usurper.

After the grand war, on which the Yadu federation was broken up, the PANDÚS, with HERI and BALDEVA, abandoned their dominions on the Yamuna for Saurashtra. Here, in their ancient haunts, they remained some time; but if we judge from the traditional accounts of HERI's assassination, and ARJUNA's being despoiled even of his bow, by the aboriginal races, they must have lost all their power. It is affirmed that such was the fraternal affection of BALDEVA for HERI, that he would not part with the body; but carried it about with him until decomposition took place, when he allowed it to be interred. YUDISHTRA, sick of dominion, together with BALDEVA and a band of the Pandús and Hericúlas, abandoned the peninsula of the *Sauras*, and crossing the Indus, retired to the north, and were supposed to have perished in the snowy mountains of Himachel. During this retreat a portion of them may have lingered in a nook of the Punjáb, and formed the nucleus of the *Sobii** adorers of Hercules, found by Alexander 350 years before Christ.

On this termination of the fortunes of the Yadús, ABHIMUN, son of ARJUNA, succeeded to the throne of Indraprestha, or Dehli, abandoned by YUDISHTRA, who left therewith his era; while HERI and BALDEVA had the honours of deification, the former in Mat'húra, the latter in that called after him BALDÉVA, *vulg.* BULDEO, the Heraclea of India.

Regarding BHÍMA tradition is silent; but those multitudinous uninscribed columns scattered every where over India bear his name, being termed *Bhím-ca-súla*, *Bhím-ca-tír*, the pillars of BHÍM; the arrows of BHÍM; also *Taili-ca-lat'h*, or the "oilman's staff," from the custom of pouring oil and marking them with a cross of vermillion. As BHÍMA was a Hericúla, these are the *Pillars of Hercules*. Mythological history records no less than forty-three deified heroes bearing this name.†

* According to the *Raj Taringini* of the celebrated Vidyddhar, minister of Soway Jey Sing, their retreat was "by Tatha Mooltan to Badrinath." They could move in no direction without finding people of their own race, more especially in the Caucasian (*Khó-khúsa*) range, whence they originally came. The GHICKERS, JOUDIS, JOHYAS, and other tribes bordering these alpine barriers, maintained the habits of the Pandus to a very late period; and Polyandrisms still prevails there as amongst their colonies in Malabar.

† It might be deemed idle to contrast the Exodus of the Hericúla from India with the return of the Heraclidæ into the Grecian Peloponnesus: the periods agree; for this event was

The annals of the Yadu-Bhattis of Jesselmér who are descended from HERI, take up the history of his sons immediately following his death. NABA, his grandson, who returned to Mathura on that event, carrying with him all the insignia of rule, did not remain there, but followed his relative out of India proper ; they say that his descendants ruled in Zabulist'han,* established Gujni, and were the progenitors of the Chagitais, and that their

A. A. C. 1078, according to the best chronologists, and the *Great War* about 1100. There are besides other curious affinities :—

The Grecian Heraclidæ claim Atreus as progenitor.

Euristhenes was the first king of the Heraclidæ.

The Ionians or Greeks have their name from Javan, the seventh from Japhet, son of Noah.

The Indo-Scythic Hericúla claim from Atri, father of Soma or Indu.

Yudishtra, king of the Hericúla, led the colony out of India. Etymologists would find sufficient similitude in the names of the leaders ; the initial syllable is the same in both ; *r* and *d* are permutable letters, and the euphonous Greek termination for the harsher Indian is common.

The Hericúlas and Pandus have also an ancestor in Javan, or Yavan, the 13th from *Yáyát*, the third son of their primeval patriarch, *Nahus*. This Yavan is the progenitor of the Indo-Scythic *Yavanas*, constantly alluded to in Menu and the Poorans.

Eight hundred years after this memorable event, Alexander, of Yavan descent, invaded the haunts of the Hericúla, and found abundant sources of analogy in the theogonies of India and his own country to amuse his veterans. If he built a fleet in the Punjab, navigated the Indus, and coasted to Babylon, what physical impossibility existed to the Indo-Scythic Hericulas wandering westward to Thrace and Ionia—a line of route abundantly tracked in subsequent ages, by Huns, Getes, and Tatars, all from the same haunts of Central Asia ?

That sublime, though apocryphal epic, the *Iliad*, is asserted to have been written by Lycurgus, during his residence amongst the Indo-Getic races of *Parva-Scythia*, whence Greece and Italy were colonized and civilized. This region, Thrace, was the very cradle of divine poesy, and from it they bring Orpheus, who is vested with all the attributes and qualifications of the *Naréda* of the Hindus. If Yudishtra, Baldeva, and the Hericulas, journeyed thus far, carrying their letters and their bards in their train, then, indeed, the events of the *Máhábhārata*, the divine strains of Vyasa and Sookdéva, might have afforded abundant hints to Lycurgus for the composition of the *Iliad* ; and hence the similarity of the characters ascribed to the Pandus, with those of the Celto-Etruscan, would at once be accounted for.

* This is the original country of RUSTAM, the Persian Hercules, who is supposed by Sir W. Jones to have been a cotemporary of Cyrus the Great. Sir W. Ouseley has given us a very interesting sketch of the Persian Hero in the 2d vol. of his *Travels in Persia*.

sway actually extended to Samarkhand. While this branch of the Hericúla under NABA thus ruled in central Asia, the sons of his brother KHÍRA fixed themselves, the first, JHAREJA, in Saurashtra; the other, Judbhán, at BEHERA and *Juddoo-ca-dang*.—Saurashtra, the *Syrestrene* of the Greeks, the kingdom of TESARIOUSTUS, conquered by MENANDER, embraced from the Indus to the gulph of Cambay; while the *Joudis*, or mountaineers of Joude, a small cluster of hills in the Punjáb, remained a distinct race even to Baber's days. But it would be impossible here to give even an indistinct outline of those important branches of the Hericúla races, who with their CÚRÚ or Caurva brethren, have left indelible traces from the "Cliffs of Caucasus" to utmost isle Taprobane."—The "*Caroora regia Cerobothri*," adjoining the "*Modura regia Pandionis*," on the Coromandel Coast, was in all probability named from a colony of the children (*putra*) of the CURUS; and Coromandel itself may be *Cúrú-mandala*, the region of the CÚRÚS.

Colonel Wilks, in his valuable History, while describing Madura as the capital of the Panduan race, says, "This invader, from his wonderful success, is said to have been attended by an army of demons (*Bootum*), and thence called *Booté Pandé Raj*." But this presents an additional proof of these colonists prefixing the name of their great patriarch BÚDHA to their own. The characters discovered in the Carnatic are the same as those in the columns and rocks at Dehli, Saurashtra, and Medhya-désa.

Wilson,* in his erudite "Remarks on the History and Chronology of Cashmere," proves that a long line of the CÚRÚS, or Caurvas, and Pandús, ruled in Cashmere; and points out from classical authority a Pandu colony even in Sogdiana. Now this would perfectly assimilate with what is said of their establishments from Zabulistan, and the *Marúst'hálí*, mentioned in the old couplet (page 142), may be the desert of Sogdiana. But it appears to me, that CÚRÚ, the progenitor of this extensive race, was king of all those regions, west as well as east of the Indus, and that he professed the religion of BÚDHA, the patriarch of his race, who, being from Sacadwípa, was styled *Sácýámooní*, teacher of the Sacæ, in his twofold capacity of priest and king, and that all these characters found on rocks and

* I had written the notes for my Dissertation on Mr. Perry's ring long before I saw Mr. Wilson's History of Cashmere, indeed, I might say, before it appeared in England; the coincidence of our opinions is, therefore, the more extraordinary. I feel gratified at having such support to my hypothesis.

columns scattered throughout India belong to this race, distinctively called Anva,* Indu, Chandrá, Soma, in opposition to the more ancient Suryas, the earlier sovereigns of India.

It only remains to mention the *monogram*, compounded of two letters, which may be found both in the Samaritan and Celto-Etruscan alphabets. It will be recollected that on the first discovery of the ancient inscription at Dehli, the idea floated that it was Greek, and the Pandu pillar was converted into a trophy of Alexander. It is to be wished that some clue to these incipitions could be found, or that they might be traced in *Panchalicá*, Cashmere, and tracts west of the Indus, as well as the *Pandúan Raj* (Dehli and its dependencies), *Medhya-désa* (Central India), *Saurashtra*, and the *Carnatic*. One of the compartments of the Girnar-rock inscription in the peninsula of the Sauras (the Συρον of the Periplus, where terminated the conquests of the Greco-Bactrian kings, MENANDER and APOLLODOTUS) concludes, with the identical letters on the *intaglio*, placed disjointed and detached from the inscription, thus as it were showing their importance. I subjoin them, and likewise a few of those characters having that resemblance to the ancient Greek or Etruscan, which led to the error described. We know what these are *not*, that they have no affinity to the *Dévánágari*. The first line contains characters of the oldest Greek or Etruscan; No. 1 is the ancient *kappa*, supposed by Payne Knight (p. 9) to be anterior to the Trojan war; 2, is the Celto-Etruscan *zeta*; 3, the *lambda*; 4, is the old *sigma*, and occurs as often as 5, the modern *sigma*; 6, the Greek *delta*, is the Celto-Etruscan *beta* or *v*, and answers to the Samaritan *ain*; 7, 8, 9, the *omicron*, *theta*, *phi*, require no remark; 10, is the Celto-Etruscan *ro*; and 11 and 12 are also Etruscan.

The second line contains ten letters, which are Samaritan, an *aleph*, *be*, *pe*, *he*, *ain*, *nun*, *tau*, *tau*, while the various other letters on this rock appear compounds from these. But this proves nothing but a superficial similitude. I hold all these inscriptions at the disposition of the Society; by the publication of the fac-similes, the learned of Europe may be enabled to form their own conclusions, whether they possess more than external resemblance

* Anacoonda or Anagoondé, a suburb of Vijyanuggur, is, in all probability, derived from Anva. Colonel Wilks says from the Mackenzie Papers, the Yadava or Yadu race founded this ancient abode. He adds, "innumerable traces exist of vast and successive emigrations of this race of herdsmen (*palis*) and warriors, who carried devastation amongst the agricultural tribes of the South, and in process of time became incorporated with their opponents."

to the ancient characters of other nations. Although I have elsewhere mentioned the circumstance, I may here repeat it, that I discovered this singular rock in the year 1823, in a journey through Saurashtra and Cutch, *en route* to the Indus. The rock is a small insulated mass of compact slate, without a single fissure or rent, forming a hemisphere of about thirty feet diameter, and is nearly covered with inscription. It is not far from the gorge of the mountains by which egress is obtained to the hill of *Gīrnār*, one of the five sacred mounts of the Budhists or Jains, and the cradle of that faith in India. To them these characters appertain, and will be found in all their early haunts. The Pandu caves are near this rock, and contain a few of the characters.

Characters of the Girnar Rock-Inscription :



VIII.—*A Disputation respecting CASTE by a BUDDHIST, in the form of a Series of Propositions supposed to be put by a SAIVA and refuted by the Disputant.*
—Communicated by B. H. HODGSON, Esq., M.R.A.S.

Read January 1, 1831.

To the Secretary of the Asiatic Society.

SIR :

Nepal Residency,

July 11th, 1829.

A few days since my learned old *Bauddha* friend brought me a little tract in Sanscrit, with such an evident air of pride and pleasure, that I immediately asked him what it contained. "Oh, my friend!" was his reply, "I have long been trying to procure for you this work, in the assurance that you must highly approve the wit and wisdom contained in it; and, after many applications to the owner, I have at length obtained the loan of it for three or four days. But I cannot let you have it, nor even a copy of it, such being the conditions on which I procured you a sight of it." These words of my old friend stimulated my curiosity, and with a few fair words I engaged the old gentleman to lend me and my *pandit* his aid in making a translation of it; a task which we accomplished within the limited period of my possession of the original, although my *pandit* (a Brahman of Benares) soon declined co-operation with us, full of indignation at the author and his work! Notwithstanding, however, the loss of the *pandit's* aid, I think I may venture to say that the translation gives a fair representation of the *matter* of the original, and is not altogether without some traces of its *manner*.

It consists of a shrewd and argumentative attack, by a *Bauddha*, upon the Brahmanical doctrine of caste: and what adds to its pungency is, that throughout, the truth of the Brahmanical writings is assumed, and that the author's proofs of the erroneousness of the doctrine of *caste* are all drawn from those writings. He possesses himself of the enemy's battery, and turns their own guns against them. To an English reader this circumstance gives a puerile character to a large portion of the Treatise, owing to the enormous absurdity of the data from which the author argues. His inferences, however, are almost always shrewdly drawn, and we must remember that not he but his antagonists must be answerable for the character of the data. To judge by the effect produced upon my Brahman *pandit*—a wise man in his generation, and accustomed for the last four years to the examination of *Bauddha* literature—by this little Treatise, it would seem that there is no method of assailing Brahmanism comparable to that of "judging it out of its own mouth:" and the resolution of the Committee of the Seram-

pore college to make a thorough knowledge of Hindu learning the basis of the education of their destined young apostles of Christianity in India, would thence appear to be most wise and politic: but to return to my little Treatise.

We all know that the Brahmans scorn to consider the Sudras as of the same nature with themselves, in this respect resembling the bigoted Christians of the dark ages, who deemed in like manner of the Jews. The manner in which our author treats this part of his subject is, in my judgment, admirable, and altogether worthy of a European mind. Indeed it bears the closest resemblance to the style of argument used by Shakspeare, in covertly assailing the analogous European prejudice already adverted to. I need not point more particularly to the glorious passage in the Merchant of Venice: "Hath not a Jew eyes, hands, organs, dimensions, senses, passions; fed with the same food, hurt by the same diseases?" &c. &c.

The *Bauddha* Treatise commences in the sober manner of a title page to a book; but immediately after the author has announced himself with due pomp, he rushes "*in medias res*," and to the end of his work maintains the animated style of *vivâ voce* disputation. Who ASHU GHOSHA, the author, was, *when* he flourished and *where*, I cannot ascertain. All that is known of him at Nepal is, that he was a *Maha pandit*, or great sage, and wrote, besides the little Treatise now translated, two larger *Bauddha* works of high repute, the names of which are mentioned in a note.*

I am, &c.

B. H. HODGSON.

I, ASHU GHOSHA, first invoking MANJA GHOSHA, the *Guru* of the world, with all my soul and all my strength, proceed to compose the book called *Vajra Suchi*, in accordance with the *Shastras* (Hindu or Brahmanical *Sastras*).

Allow then that your *Vedas* and *Smrittis*, and works involving both *Dharma* and *Artha*, are good and valid, and that discourses at variance with them are invalid, still what you say, that the Brahman is the highest of the four castes, cannot be proved from those books.

Tell me, first of all, what is Brahmanhood? Is it life, or parentage, or body, or wisdom, or the way (*âchâr*), or acts, *i. e.* morality (*Karam*), or the *Vedas*?

If you say it is life (*jîva*), such an assertion cannot be reconciled with

* The *Buddha Charitra Kāvya*, and the *Nandi-Mukhasughosha Avadân*, and other works.

the *Vedas*; for, it is written in the *Vedas*, that “the sun and the moon, INDRA, and other deities, were at first quadrupeds; and some other deities were first animals and afterwards became gods; even the vilest of the vile (*Svapak*) have become gods.” From these words it is clear that Brahmanhood is not life (*jiva*), a position which is further proved from these words of the *Mahabharata*: “Seven hunters and ten deer, of the hill of Kalinjal, a goose of the lake Mansaravara, and a *chakwa* of Saradwipa, all these were born as Brahmans, in the *Kurukshetra* (near Dehli), and became very learned in the *Vedas*.” It is also said by MANU, in his *Dharma Sastra*, “Whatever Brahman learned in the four *Vedas*, with their *ang* and *upang*, shall take charity from a Sudra, shall for twelve births be an ass, and for sixty births a hog, and seventy births a dog.” From these words it is clear that Brahmanhood is not life; for, if it were, how could such things be?

If, again, you say that Brahmanhood depends on parentage or birth (*jāti*); that is, that to be a Brahman one must be born of Brahman parents,—this notion is at variance with the known passage of the *Smriti*, that ACHALA MUNI was born of an elephant, and CESA PINGALA of an owl, and AGASTYA MUNI from the *Agasti* flower, and COUSIKA MUNI from the *Cusa* grass, and CAPILA from a monkey, and GAUTAMI RISHI from a creeper that entwined a Saul tree, and DRONA ACHARYA from an earthen pot, and TAITTIRI RISHI from a partridge, and PARSWA RAMA from dust, and SRINGA RISHI from a deer, and VYASA MUNI from a fisherwoman, and KOSHIKA MUNI from a female Sudra, and VISWA MITRA from a *Chandalni*, and VASISHTHA MUNI from a strumpet. Not one of them had a Brahman mother, and yet all were notoriously called Brahmans; whence I infer, that the title is a distinction of popular origin, and cannot be traced to parentage from written authorities.

Should you again say, that whoever is born of a Brahman father or mother is a Brahman, then the child of a slave even may become a Brahman; a consequence to which I have no objection, but which will not consort with your notions, I fancy.

Do you say, that he who is sprang of Brahman parents is a Brahman? Still I object that, since you must mean pure and true Brahmans, in such case the breed of Brahmans must be at an end; since the fathers of the present race of Brahmans are not, any of them, free from the suspicion of having wives, who notoriously commit adultery with Sudras. Now, if the

real father be a Sudra, the son cannot be a Brahman, notwithstanding the Brahmanhood of his mother. From all which I infer, that Brahmanhood is not truly derivable from birth; and I draw fresh proofs of this from the *Manava Dharma*, which affirms that the Brahman who eats flesh loses instantly his rank; and also, that by selling wax, or salt, or milk, he becomes a Sudra in three days; and further, that even such a Brahman as can fly like a bird, directly ceases to be a Brahman by meddling with the flesh-pots.

From all this is it not clear that Brahmanhood is not the same with birth: since, if that were the case, it could not be lost by any acts however degrading. Knew you ever of a flying horse that by alighting on earth was turned into a pig?—'Tis impossible.

Say you that body (*Sarir*) is the Brahman? this too is false; for, if body be the Brahman, then fire, when the Brahman's corpse is consumed by it, will be the murderer of a Brahman; and such also will be every one of the Brahman's relatives who consigned his body to the flames. Nor less will this other absurdity follow, that every one born of a Brahman, though his mother were a *Kshatriya* or *Vaisya*, would be a Brahman—being bone of the bone, and flesh of the flesh of his father: a monstrosity, you will allow, that was never heard of. Again, are not performing sacrifice, and causing others to perform it, reading and causing to read, receiving and giving charity, and other holy acts, sprung from the body of the Brahman?

Is then the virtue of all these destroyed by the destruction of the body of a Brahman? Surely not, according to your own principles; and, if not, then Brahmanhood cannot consist in body.

Say you that wisdom* constitutes the Brahman? This too is incorrect. Why? Because, if it were true, many Sudras must have become Brahmans from the great wisdom they acquired. I myself know many Sudras who are masters of the four *Vedas*, and of philology, and of the *Mimansa*, and *Sanc'hya*, and *Vaisheshika* and *Jyotishika* philosophies; yet not one of them is or ever was called a Brahman. It is clearly proved then, that Brahmanhood consists not in wisdom or learning. Then do you affirm that the *Achár* is Brahmanhood? This too is false; for if it were true, many Sudras would become Brahmans; since many *Nats* and *Bhats*, and *Kaivertas*,

* Perhaps it should rather be translated *learning*. The word in the original is *jnyana*.

and *Bhānds*, and others, are everywhere to be seen performing the severest and most laborious acts of piety. Yet not one of these, who are all so pre-eminent in their *Achār*, is ever called a Brahman : from which it is clear that *Achār* does not constitute the Brahman.

Say you that *Karam* makes the Brahman? I answer, no ; for the argument used above applies here with even greater force, altogether annihilating the notion that acts constitute the Brahman. Do you declare that by reading the *Vedas* a man becomes a Brahman? This is palpably false ; for it is notorious that the *Rakshasa* RAVAN was deeply versed in all the four *Vedas* ; and that, indeed, all the *Rakshasas* studied the *Vedas* in RAVAN's time : yet you do not say that one of them thereby became a Brahman. It is therefore proved that no one becomes a Brahman by reading the *Vedas*.

What then is this creature called a Brahman? If neither reading the *Vedas*, nor *Sanskara*, nor parentage, nor race (*Kula*), nor acts (*Karam*), confers Brahmanhood, what does or can? To my mind Brahmanhood is merely an immaculate quality, like the snowy whiteness of the *Kundh* flower. That which removes sin is Brahmanhood. It consists of *Urāta*, and *Tapas*, and *Neyama*, and *Ripavas*, and *Dan*, and *Dāma*, and *Shāma*, and *Sānyama*. It is written in the *Vedas* that the gods hold that man to be a Brahman who is free from intemperance and egotism ; and from *Sanga*, and *Parigraha*, and *Praga*, and *Dwesha*. Moreover, it is written in all the *Sastras* that the signs of a Brahman are these, truth, penance, the command of the organs of sense, and mercy ; as those of a *Chāndala* are the vices opposed to those virtues. Another mark of the Brahman is a scrupulous abstinence from sexual commerce, whether he be born a god, or a man, or a beast. Yet further, SUKRA ACHARYA has said, that the gods take no heed of caste, but deem him to be the Brahman who is a good man although he belong to the vilest. From all which I infer, that birth, and life, and body, and wisdom, and observance of religious rites (*achār*), and acts (*karam*), are all of no avail towards becoming a Brahman.

Then again, that opinion of your sect, that *pravrajaya* is prohibited to the Sudra ; and that for him service and obedience paid to Brahmans are instead of *pravrajaya*,—because, forsooth, in speaking of the four castes, the Sudra is mentioned last, and is therefore the vilest,—is absurd ; for, if it were correct, INDRA would be made out to be the lowest and meanest of beings, INDRA being mentioned in the *Parni Sutra* after the dog, thus—

“*Shua, Yua Maghwa.*” In truth, the order in which they are mentioned or written, cannot affect the relative rank and dignity of the beings spoken of.

What! is PARVATI greater than MAHESA? or are the teeth superior in dignity to the lips, because we find the latter postponed to the former, for the mere sake of euphony, in some grammar sentence? Are the teeth older than the lips; or does your creed teach you to postpone SIVA to his spouse? No; nor any more is it true that the Sudra is vile, and the Brahman high and mighty, because we are used to repeat the *Chatur Varána* in a particular order. And if this proposition be untenable, your deduction from it, *viz.* that the vile Sudra must be content to regard his service and obedience to Brahmans as his only *pravrajaya*, falls likewise to the ground.

Know further, that it is written in the *Dharma Sastra* of MENU, that the Brahman who has drank the milk of a *Sudarni*, or has been even breathed upon by a *Sudarni*, or has been born of such a female, is not restored to his rank by *prayáschitta*. In the same work it is further asserted, that if any Brahman eat and drink from the hands of a *Sudarni*, he becomes in life a Sudra, and after death a dog. MANU further says, that a Brahman who associates with female Sudras, or keeps a Sudra concubine, shall be rejected by gods and ancestors, and after death shall go to hell. From all these assertions of the *Mandva Dharma*, it is clear that Brahmanhood is nothing indefeasibly attached to any race or breed, but is merely a quality of good men. Further, it is written in the *Sastra* of MANU, that many Sudras became Brahmans by force of their piety; for example, KATHINU MUNI, who was born of the sacrificial flame produced by the friction of wood, became a Brahman by dint of *Tapas*; and VASISHTHA MUNI, born of the courtesan URVASI; and VYASA MUNI, born of a female of the fisherman's caste; and RISHIYA SRINGA MUNI, born of a doe; and VISHVA MITRA, born a *Chandalni*; and NARED MUNI, born of a female spirit-seller; all these became Brahmans by virtue of their *Tapas*. Is it not clear then that Brahmanhood depends not on birth? It is also notorious that he who has conquered himself is a *Yati*; that he who performs penance is a *Tapasya*; and that he who observes the *Brahma charya* is a Brahman. It is clear then that he whose life is pure, and his temper cheerful, is the true Brahman; and that lineage (*Kula*) has nothing to do with the matter. There are these *slokas* in the *Manava Dharma*, “Goodness of disposition

and purity are the best of all things; lineage is not alone deserving of respect. If the race be royal and virtue be wanting to it, it is contemptible and useless." KATHINA MUNI and VYASA MUNI, and other sages, though born of Sudras, are famous among men as Brahmans; and many persons born in the lowest ranks have attained heaven by the practice of uniform good conduct (*sila*). To say therefore that the Brahman is of one particular race is idle and false.

Your doctrine, that the Brahman was produced from the mouth, the Kshatriya from the arms, the Vaisya from the thighs, and the Sudra from the feet, cannot be supported. Brahmans are not of one particular race. Many persons have lived who belonged to the *Kaivarta Kul*, and the *Rajaka Kul*, and the *Chándal Kul*, and yet, while they existed in this world, performed the *Chura Karan*, and *Mung-bandan*, and *Dant-kashtha*, and other acts appropriated to Brahmans, and after their deaths became, and still are, famous under the Brahmans.

All that I have said about Brahmans you must know is equally applicable to Kshatriyas; and that the doctrine of the four castes is altogether false. All men are of one caste.

Wonderful! You affirm that all men proceeded from one, *i. e.* Brahma; how then can there be a fourfold insuperable diversity among them? If I have four sons by one wife, the four sons, having one father and mother, must be all essentially alike. Know too that distinctions of race among beings are broadly marked by differences of conformation and organization: thus, the foot of the elephant is very different from that of the horse; that of the tiger unlike that of the deer; and so of the rest: and by that single diagnosis we learn that those animals belong to very different races. But I never heard that the foot of a Kshatriya was different from that of a Brahman, or that of a Sudra. All men are formed alike, and are clearly of one race. Further, the generative organs, the colour, the figure, the ordure, the urine, the odour, and utterance, of the ox, the buffalo, the horse, the elephant, the ass, the monkey, the goat, the sheep, &c. furnish clear diagnostics whereby to separate these various races of animals: but in all those respects the Brahman resembles the Kshatriya, and is therefore of the same race or species with him. I have instanced among quadrupeds the diversities which separate diverse genera. I now proceed to give some more instances from among birds. Thus, the goose, the dove, the parrot, the peacock, &c. are known to be different by their diversities of figure,

and colour, and plumage, and beak : but the Brahman, Kshatriya, Vaisya and Sudra are alike without and within. How then can we say they are essentially distinct? Again, among trees the *Bdta*, and *Bakula*, and *Palás*, and *Ashoka*, and *Tamal*, and *Nagkeswar*, and *Shirik*, and *Champa*, and others, are clearly contradistinguished by their stems, and leaves, and flowers, and fruits, and barks, and timber, and seeds, and juices, and odours ; but Brahmans, and Kshatriyas, and the rest, are alike in flesh, and skin, and blood, and bones, and figure, and excrements, and mode of birth. It is surely then clear that they are of one species or race.

Again, tell me, is a Brahman's sense of pleasure and pain different from that of a Kshatriya? Does not the one sustain life in the same way, and find death from the same causes as the other? Do they differ in intellectual faculties, in their actions, or the objects of those actions ; in the manner of their birth, or in their subjection to fear and hope? Not a whit. It is therefore clear that they are essentially the same. In the *Udambúra* and *Panosa* trees the fruit is produced from the branches, the stem, the joints, and the roots. Is one fruit therefore different from another, so that we may call that produced from the top of the stem the Brahman fruit, and that from the roots the Sudra fruit? Surely not. Nor can men be of four distinct races, because they sprang from four different parts of one body. You say that the Brahman was produced from the mouth ; whence was the Brahmani produced? From the mouth likewise? Grant it—and then you must marry the brother to the sister! a pretty business indeed! If such incest is to have place in this world of ours, all distinctions of right and wrong must be obliterated.

This consequence, flowing inevitably from your doctrine that the Brahman proceeded from the mouth, proves the falsity of that doctrine. The distinctions between Brahmans, Kshatriyas, Vaisyas and Sudras, are founded merely on the observance of divers rites, and the practice of different professions ; as is clearly proved by the conversation of BAISHAM PAYANA RISHI with YUDHISTHIRA RAJA, which was as follows : One day the son of PANDU, named YUDHISTHIRA, who was the wise man of his age, joining his hands reverentially, asked BAISHAM PAYANA, Whom do you call a Brahman ; and what are the signs of Brahmanhood? BAISHAM answered, The first sign of a Brahman is, that he possesses long-suffering and the rest of the virtues, and never is guilty of violence and wrong doing ; that he

never eats flesh ; and never hurts a sentient thing. The second sign is, that he never takes that which belongs to another without the owner's consent, even though he find it in the road. The third sign, that he masters all worldly affections and desires, and is absolutely indifferent to earthly considerations. The fourth, that whether he is born a man, or a god, or a beast, he never yields to sexual desires. The fifth, that he possesses the following five pure qualities, truth, mercy, command of the senses, universal benevolence, and penance.* Whoever possesses these five signs of Brahmanhood I acknowledge to be a Brahman ; and, if he possess them not, he is a Sudra. Brahmanhood depends not on race (*Kuli*), or birth (*Jat*), nor on the performance of certain ceremonies. If a *Bhanddl* is virtuous, and possesses the signs above noted, he is a Brahman. Oh ! YUDHISTHIRA, formerly in this world of ours there was but one caste. The division into four castes originated with diversity of rites and of avocations. All men were born of woman in like manner. All are subject to the same physical necessities, and have the same organs and senses. But he whose conduct is uniformly good is a Brahman ; and if it be otherwise he is a Sudra ; aye, lower than a Sudra. The Sudra who, on the other hand, possesses these virtues is a Brahman.

Oh, YUDHISTHIRA ! If a Sudra be superior to the allurements of the five senses, to give him charity is a virtue that will be rewarded in heaven. Heed not his caste ; but only mark his qualities. Whoever in this life ever does well, and is ever ready to benefit others, spending his days and nights in good acts, such an one is a Brahman ; and whoever, relinquishing worldly ways, employs himself solely in the acquisition of *Moksha*, such an one also is a Brahman ; and whoever refrains from destruction of life, and from worldly affections, and evil acts, and is free from passion and backbiting, such an one also is a Brahman ; and whoso possesses *Kshema*, and *Daya*, and *Dama*, and *Dān*, and *Satya*, and *Souchana*, and *Smriti*, and *Ghrina*, and *Vidya*, and *Vijnan*, &c. is a Brahman. Oh, YUDHISTHIRA ! if a person perform the *Brahmacharya* for one night, the merit of it is greater than that of a thousand sacrifices (*yajna*). And whoso has read all the *Vedas*, and per-

* The word in the original is *Tapas*, which we are accustomed to translate "penance," and I have followed the usage, though "ascetism" would be a better word. The proud *Tapasyi*, whom the very gods regard with dread, never dreams of contrition and repentance.

formed all the *Tirthas*, and observed all the commands and prohibitions of the *Sastra*, such an one is a Brahman! and whoso has never injured a sentient thing by act, word or thought, such a person shall instantly be absorbed (at his death) in BRAHMA. Such were the words of BAISHAM PAYANA. Oh, my friend, my design in the above discourse is, that all ignorant Brahmans and others should acquire wisdom by studying it, and take to the right way. Let them, if they approve it, heed it; and if they approve it not, let them neglect its admonitions.

VIII.—*An Account of the Marriage Ceremonies of the Hindus and Mahommedans, as practised in the Southern Peninsula of India.—Compiled by the late Colonel COLIN MACKENZIE.—Communicated by Sir A. JOHNSTON, Vice President R.A.S.*

Read February 5th, 1831.

To the Secretary of the Royal Asiatic Society.

SIR :

I have the honour to enclose to you an account of the form of Marriage which prevails amongst the Hindus, and of that which prevails amongst the Mahommedans in the Peninsula of India. It was drawn up, as the late Colonel Mackenzie told me, under his direction, by several natives whom he had employed for that purpose, and was sent to me by him at my request, when, as Chief Justice and President of his Majesty's Council on Ceylon, I was commanded by his Majesty's Ministers to prepare a Hindu and a Mahommedan Code for the Hindu and Mahommedan inhabitants of that island. A very large body of Hindus, descended from the Hindus of the Southern Peninsula of India, inhabit the northern and eastern provinces; and about 90 or 100,000 Mahommedans, who are descended from the Arabs, inhabit the sea-coasts and some parts of the interior of the island. The form, according to which the marriage of each of those two classes of inhabitants in Ceylon ought to be legally solemnized, is the same, subject to certain local modifications, as that according to which the marriages of the Hindus and Mahommedans in the Peninsula of India are solemnized. I therefore endeavoured to obtain, by applying to some of the most intelligent persons, natives as well as Europeans, in the Peninsula of India, an accurate account of that form. Amongst all the different accounts which I received, the one which I have now the honour of sending you is that which appeared to me to be the most detailed and the most explicit, and that which, when submitted by me, according to the plan I invariably adopted in such cases, for the consideration of the native jurymen of the Hindu and Mahommedan persuasions, received the most general approbation amongst them.

I have the honour to be, &c.

ALEXANDER JOHNSTON.

The Marriage Ceremonies of the Hindoos.

EVERY man should use his utmost endeavours to have his daughter married before she is nine years of age; and when he shall have accomplished

that object he will obtain his reward in the like manner as if he had performed a religious sacrifice. If from poverty, or any other unavoidable cause, he should be prevented from marrying his daughter sooner, he should not on any account postpone it after she arrives at the age of ten years, or else shame and disgrace will fall upon him. When a man is desirous of marrying his daughter, he first ascertains an auspicious day, on which he relates his intentions to his Brahmin and his barber, and giving them money and betel-leaves he deposes them in search of a youth, who must be three or four years older than his daughter, of a respectable family, and of the same caste with his own. He advises them to consult some learned astrologer as to the favourable marks, signs, and nativity of the youth, and to point out if possible a suitable husband for his daughter. When they shall have ascertained a proper person, and communicated to him the result of their search, he sends them with a letter to the youth's father, containing proposals for a marriage between their children; he instructs them to ask for a genealogical table of his and his wife's family, that he may ascertain whether they are of a proper rank and condition in life, or in anywise related to him, at the same time he sends a similar table of his own family. If the parties agree, these tables are laid before their respective relations, and if approved by them they express their satisfaction. They then make up balls composed of turmeric and orange juice, which they dry and scrape, and rub the dust over the tables; they return them in this state, as a mark of their approbation that the proposals are accepted, and that no relationship subsists to prevent the marriage.

On a lucky day the Brahmin and barber are again sent to the boy's father to receive from him the *Shigún*, or first portion of the marriage settlement, the amount of which has previously been determined; this portion must be one-tenth of the whole amount. Soon after the *Shigún* shall have been received, the girl's father, on an auspicious day previously ascertained, again deposes his Brahmin and barber to the boy's father, with the *Tillak*, or nuptial mark, to be put on the bridegroom's forehead on the day of marriage, with a sum of money, which must not be less than ten times the amount of the *Shigún*, together with sundry kinds of vessels, clothes according to custom, a hookah, white sandal-wood, betel-leaves, wreaths of flowers, and gold and silver ornaments, agreeable to his means. The father of the boy on that day commences the marriage ceremonies, and invites his relations to see the *Tillak*; they examine the presents sent with the *Tillak*,

and partake of an entertainment. A mound of earth is then raised in front of the boy's house, plastered with cow-dung, and pounded grain is sprinkled over it. The Brahmins ascertain a fortunate hour, on which the bridegroom is clothed in his wedding garments, and placed on a low wooden seat on the mound. The women of the family on this occasion commence their songs, containing an account of the marriages of RÁMA CHANDRA, and of MAHADEVYA. A barber, on the part of the bride's father, washes the bridegroom's feet, and lays before him the presents he has brought; the whole party then perform ceremonies of worship to GAURI and GANÉSA, after which the bride's Brahmin puts the *Tillak*, or nuptial mark, on the bridegroom's forehead, and offers his congratulations. The betel-leaves and wreaths of flowers, sent by the bride's father, are distributed among the Brahmins and relations of the bridegroom; the whole assembly then retire to the house, where they perform the ceremony of the *Chúmavar*, or touching the bridegroom; that is, they hold in both hands a small quantity of ground rice, with which they touch every part of his body, from his feet to his forehead, giving their blessings every time they touch him. They next worship the household gods; and having fed the Brahmin and barber, and dismissed them, an entertainment is served to the guests.

The next morning the Brahmins perform the ceremony of the *Lagan-Patra*, or ascertaining a proper day on which the marriage shall take place; the day fixed is made known to the bride's father, who sends his Brahmin with some rice and turmeric, and the bridegroom's father having mixed with them a similar quantity of both articles, the whole is divided into two parts, and an equal portion is delivered to the Brahmins of both parties. The Brahmin and barber are properly rewarded and dismissed, when they return to give an account of the good qualities of the bridegroom. Five days previous to the marriage ceremony, both parties prepare canopies in front of their own houses; on the first of these five days the canopies are erected; on the second day they entertain their respective relations; and on the third the *Bárát*, or marriage procession, is made ready. During these five days persons are stationed near the canopies with kettle-drums and other music, on which they continue playing during the greater part of the day and night; a large space round the canopies is ornamented with branches of trees, lanterns, and flowers, made of coloured paper talc, and every other kind of decoration; that those who behold them may know that a marriage is to be celebrated, and rejoice accordingly. From

the day of the *Lagan-Patra* the bride and bridegroom are confined to their own houses, which they are not permitted to leave, nor even to put on clean clothes; they are every morning and evening rubbed with meal, that their limbs and bodies may be rendered soft and pliant; and they continue to wear the same clothes. The third day the *Bárát*, or marriage procession, on the part of the bridegroom, is made ready. On the day of marriage the bride and bridegroom, with their fathers and mothers, must keep strict fast. When the *Bárát* is assembled, the bridegroom is clothed in a dress of brocade, or of yellow cloth, with a red turban, on which sundry ornaments are placed, and over it a cap, in the form of the branch of a date tree, made of flowers or brocade, and bound by a string of real or false pearls on a piece of gold cloth. He is placed on a platform raised on men's shoulders, or in a palankeen, or on a horse, whose saddle is highly ornamented; he is preceded by illuminations, fireworks, flags, &c. and with various other decorations. Four large lanterns made of talc are suspended on poles, and carried close by his side, that he may be concealed under the shade of them; led horses are conducted before him; women, on platforms carried by men, sing and dance the whole time; his relations, some on horses and others on foot, follow immediately after him in a long line and in regular order. In this mode they proceed towards the house of the bride, at a short distance from which a man, on the part of the bride's father, who had been dispatched to view the procession, meets them and delivers a letter to the bridegroom's father, who dismisses the messenger with a present to acquaint the bride's father of his near approach. The relations and friends of the bride then set out in similar state and order, attended by music, fireworks, illuminations, &c. to meet the bridegroom's procession, and conduct it to their house, at the door of which a ceremony is performed by the bride's father. He takes in his hands money, consisting of gold and silver, according to his means, with vessels of brass or copper, which he presents to the bridegroom, and places with his own hand the nuptial mark on his forehead. Both parties then retire to a place prepared for their reception by the bride's father, on which a cloth, sprinkled with scented water, grains of rice and grass, is spread; the relations of the bridegroom there deposit the presents and other articles they have brought with them.

The bridegroom is placed on a raised seat under the canopy, and his relations take their stations round him; then the servants of the bride's father bring trays, in number from five to fifty-one, according to his rank and situa-

tion in life, containing sweetmeats piled in different forms, and cups of sherbet, each tray being covered with a coloured cloth. The bride's Brahmin receives the trays from the servants, and places them before the bridegroom's father, after which ceremonies of worship are performed to GAURI and GANÉSA. The servants are rewarded, and each of them taking a handful of pulse-flour, and singing satirical songs usual on the occasion, scatters the flour on the persons who formed the marriage procession. Some of the Brahmins next take a vessel containing water from the Ganges, a pair of *dhoties*, or clothes worn from the waist downwards, and money, and present them to the bridegroom's father; then the relations of the bride, who till that time had remained at a short distance, come forward, congratulating those of the bridegroom with friendly salutations, and exchange betel-leaves with each other as a mark of satisfaction. The relations of both parties now retire to a distance, the bridegroom's barber comes forward with a vessel of water he had brought with him, and shaves the father of the bride. The brother of the bridegroom is next brought forward to perform the ceremony termed *Gáohdth*; that is, his father sends him with such articles as he has brought for the bride, such as four pyramids, made of pulse-flour and water, in the midst of which various kinds of sweetmeats are deposited, also silver ornaments and coloured garments, small baskets from five to fifty-one in number, each containing five sweetmeats, with fruits, spices, a coloured thread, rice, molasses, small red boxes, combs, vessels for holding the betel-leaf, and jewels. The bridegroom's brother, accompanied by a procession of music, illuminations, &c. conveys these things to the house of the bride, at the door of which he is met by her father, who receives them; he then conducts the bride to the *Mundoh*, or place prepared for the wedding, where she is placed with a confidential servant standing behind her. As soon as the bride is seated, the Brahmins of both parties read the Vedas and Sastras, after which the bridegroom's brother presents to the bride a dress, some jewels, and an offering in money and looks at her face; but from that time he must be particularly careful not to look at her, as it would be considered a great crime were he to see her face again until the proper time for exposing it arrives. The relations of both parties once more congratulate each other, and having again exchanged betel-leaves, they retire from the *Mundoh* to the place where they first assembled.

In a short time the bridegroom is conducted in great state to the door of the bride's house, into which he enters alone; he is met by the bride's

mother, holding a lighted lamp in each hand, and attended by women singing. She first touches the bridegroom's forehead with each of the lamps, she then holds over his head a cup of consecrated rice and milk, and conducts him to the *Mundoh*, sprinkling Ganges water before him as he walks; she places him on his seat and retires to the house.

The Brahmins of both parties again read the *Vedas*. The bride is now brought to the *Mundoh*, and seated by the left side of the bridegroom; a careful female servant stands behind each of them. Then comes the bride's mother, with her head uncovered, accompanied by other matrons, and having tied the clothes of the bride and bridegroom in a knot, she leads them by a coloured thread to the seat in the middle of the *Mundoh*, by the side of a large jar filled with water, in which various colours are mixed, and which water had been furnished by both parties on the day they erected their respective canopies. On the top of this jar a large lamp with four lighted wicks is placed; the bride's mother presents the *Cusha* grass, water from the Ganges, and other articles according to her means, together with the bride to the bridegroom, who takes hold of her hand, as a token of his receiving her as his wife. On the day of the *Lagan-Patra*, or ceremony of fixing the wedding-day, each party had sent a quantity of ears of corn,—the grain is now separated from the straw, and being parched is placed on the *Mundoh*; the bride and bridegroom are conducted seven times round the *Mundoh*, the bride walks first with her hands behind her, and the bridegroom follows holding both her hands; each time they walk round the *Mundoh* the bridegroom's brother scatters the parched grain over them. When this ceremony is concluded, the bride and bridegroom are again seated, a barber comes forward, and holding a sheet between them, he rubs a little moistened red lead on both their heads, he then withdraws the sheet and retires. The friends of the parties offer congratulations to each other, and mutually exchange betel-leaves; the bridegroom's father makes offerings to the Brahmins in the name of the bride and bridegroom, and ottar of roses and rose water are distributed among all present. The persons assembled retire from the *Mundoh* to the canopy; the bride is attended by her relations, and the bridegroom by his own. From thence the bride's mother conveys the bride and bridegroom to the house to a place prepared for the occasion, and which is denominated *Cohber*, where they put into each other's mouths curds mixed with sweetmeats. The bride's father gives an

entertainment to his guests, who afterwards retire for the night to places appointed for them.

In the morning the bride's father sends his Brahmin with presents to the father of the bridegroom, to invite him and his friends to a breakfast, which consists entirely of sweetmeats, and at mid-day various kinds of food are dressed for them. While they are at their repast the women come from the house and sing nuptial songs, with others containing satire, which is not taken amiss, but allowed on these occasions. The bride's father prepares the marriage-portion, while his wife in the house washes the bridegroom with barley-meal and scented water; the bridegroom's father also gets ready his presents for the bride. The bride's father goes into the house, and carefully collecting the clothes, jewels, and other articles brought by the bridegroom, he returns the whole, a few jewels excepted, which are necessary for the bride, such as the nose-ring, rings for wearing round the wrists, and amulets enclosed in silver cases, by the hands of his Brahmin, to the bridegroom's father, stating that these things are not required. The bridegroom's father conveys the things, thus returned, to the *Mundoh*; his friends also bring clothes and money according to their means, and deposit them in the same place. The bridegroom is seated in the *Mundoh*, with the bride at his side; the bridegroom's father then comes forward, and adorning the bride with a veil and jewels, and having made an offering in money, he places before her the articles returned by her father, to whom he says, "these things are mine, I give them to the bride; it is, therefore, necessary they should be accepted." The bride's father, after great difficulty and much entreaty, agrees to take them. The bridegroom is conducted to the house, when his mother-in-law and the other women give him jewels, rings and money; the bride's mother then falls at his feet, and tells him she has given him her daughter to be his servant; on which all the women burst into tears. The bridegroom, as soon as the women are pacified, presents to his mother-in-law a dress, with silver ornaments for binding the petticoats, which, after much entreaty on his part, she consents to receive. The bridegroom then, having collected all the presents made to him, returns to his own house accompanied by the marriage procession. On his arrival, his mother meets him at the door, holding a lighted lamp in each hand; she conducts him into the house, and the women of the family sprinkle water before him: they then pay their adorations to the household gods,

and the presents, money, and other articles, forming the bride's portion, are carefully deposited in a secure place. The relations and friends of the bridegroom have an entertainment served to them and then retire to their own houses. During three, or even five years, after the marriage, the bride remains with her own family; and in this interval the respective parties frequently send each other presents of sweetmeats, dresses, quilts, and other warm clothing for the winter season.

When the time arrives that the bride should be conducted to her husband's house, the bridegroom's father sends his barber to the bride's father with a letter, stating that such a day of such a month is an auspicious day, and requesting that he will permit his daughter to leave his house. He at first refuses to comply with this request; but on receipt of a second letter, containing the most earnest entreaties, he consents. When they have determined on what day the bride shall be conveyed to her husband, the bridegroom's father sends a suit of clothes and sweetmeats for the bride; the bride's father also prepares sweetmeats, which are enclosed in earthen jars, from one to a hundred and one, according to his means, with a suit of clothes for the bridegroom. On the day appointed the bridegroom proceeds with a procession similar to that on his marriage, or with a less number, as may be most convenient, to the bride's house. On his arrival he is seated on a mound, raised for this occasion; the Brahmins read the *Vedas*, and perform ceremonies of worship to GAURI and GANÉSA. A female of the Barber tribe cuts the nails of the bride and bridegroom, which had never been cut from the day of marriage until this occasion, and colours their hands and feet with a red dye. The bride's father delivers rings, to be worn on the fingers and toes, to his Brahmin, who first places them on the images of GAURI and GANÉSA; after which he gives one to the bridegroom, and directs him to put it on the bride's finger; the females put the other rings on the bride; the Brahmin again reads the *Vedas*, and performs other religious ceremonies. Two suits of clothes are selected from those brought by the bridegroom, one of which is given to the Brahmin, and the other to the female barber. The bride and bridegroom are next conveyed to the female apartments, in which they remain the whole night, listening to songs sung by the women; while the bride's father gives an entertainment to those relations of the bridegroom who had accompanied him, and to his own friends whom he had invited.

The next morning the bride is allowed to depart with her husband; the

bridegroom is clothed in a new dress, and wreaths of flowers are placed on his neck; all the jewels and other articles given by the bridegroom on his marriage, together with those provided on this occasion, are carefully collected and put into covered baskets, and conveyed to the house of the bridegroom. On their arrival the bridegroom's mother receives the bride; she takes her out of her palankeen, and conducts her into the house over a cloth spread on the ground, that her feet may not touch the earth; the bride and bridegroom are conveyed to the place where the household gods are kept, to whom they pay their devotions. A small portion of moistened turmerick is then put into the bride's hand, with which she makes a mark on the forehead of her mother-in-law, and on those of the other women of the family; the bridegroom's father entertains his relations and dismisses them. On that night the bride and bridegroom sleep together for the first time. At the expiration of four days the relations of the bridegroom and the females of the family visit the bride to look at her face and present their offerings; and after that ceremony has taken place there is nothing to prevent their respective relations seeing her whenever they please.

The Marriage Ceremonies of the Mahommedans.

When a man's son arrives at the age of eighteen years, or even before that period, he assembles his relations to consult with them on the propriety of his son's entering into the marriage state; and on their determination that he ought to marry, he endeavours to find out a girl of a suitable age, rank and family. As soon as he has discovered one, whose family is approved by his relations, he deposes one of the friends to the father of the girl, to propose that an alliance shall take place between their families. If the girl's father approves of the match, he presents to the messenger a cup of sherbet and some sweetmeats, and demands from him a genealogical table of the family, both on the father's and mother's side, of his intended son-in-law, that he may ascertain if they are of proper rank and condition in life for his daughter. The messenger returns and requires the genealogical tables, which he delivers to the girl's father, from whom he receives similar tables of his own family. The fathers of the parties lay these tables before their respective relations and friends, and if on examination any flaw should appear, they state their objections. If, on the contrary, the genealogical tables are approved, the boy's father dispatches a letter, written on coloured paper, and ornamented with gold leaf and suitable de-

vices, to the father of the girl, proposing a marriage between their children. This letter is inclosed in a gold or silver box, or in a bag of brocade, and is sent by the barber of the family. The girl's father, on receipt of this letter, gives the messenger a cup of sherbet and some sweetmeats, and in a day or two returns a favourable answer by the same messenger. The answer must be written on the same kind of paper, and enclosed in a similar manner as the letter; the messenger, on receiving the answer, obtains a present, consisting of money and a suit of clothes. In a few days the girl's father sends a confidential female servant to fix on a lucky day for giving sugar to the boy; and when the boy's father shall have fixed what day this ceremony shall take place, he gives the messenger sherbet, sweetmeats, money, and a dress. On the day appointed, the boy, dressed in superb garments, is attended by his relations, friends, and others to the house of the girl's father, at a short distance from which they stop in a place previously prepared for their reception. The girl's father, on receiving intimation of his arrival, sends some of his nearest relations to the boy with balls of sugar, sugar-candy, cups of sherbet, ottar, rose-water, wreaths of flowers, shawls, pieces of cloths of various kinds, *paun*, and money according to his means, placed and arranged on separate trays. These persons first give a cup of sherbet; they then cause him to eat a little sugar, and seven of the *pauns*, and put on his finger a pearl or gold ring; they next place on his shoulders wreaths of flowers and a pair of shawls, and distribute the fruits and sherbet among his friends. They deliver the trays with all the things on them to his attendants, and he returns to his own house. A few days after this ceremony some females of the boy's family proceed with sugar and similar articles to the girl's house, who is concealed in a private apartment, as she is not permitted to see any woman who is a stranger to her, more especially those connected with her intended husband; but her women receive the presents, and perform the same ceremonies in her apartment, after which the messengers are dismissed with presents; from that day presents are sent to each other by the respective parties.

When the day for the marriage shall be settled, or one month before it takes place, the ceremonies of washing with water, in which meal is mixed, and the *Manjah Khannah* are performed. The boy's father fixes on a lucky day, generally a Friday, when he assembles his relations and friends in a place prepared for the purpose, which is highly ornamented, and persons with kettle-drums and other musical instruments are placed near it. He

dresses the boy in coloured garments, scented with ottar and other perfumes, puts wreaths of flowers on his neck, and seats him in the middle of the assembly. Some of his nearest relations then strip him; they wash his body with pease-meal, bastard saffron, and other compositions, and clothe him in choice garments, which they have brought with them as presents. The garments thus given by the relations are termed *Manjah*, and the place where this ceremony is performed is, from that circumstance, denominated *Mánjah Khánnah*. From the day on which the boy is clothed in these garments, he assumes the title of bridegroom. Similar ceremonies are at the same time performed by the father of the girl. Her relations present her with clothes; and from the day on which she is seated in the *Manjah Khannah*, she is called the bride. Although the bride, after the age of seven, has not been allowed to appear before any women but those related to her, yet from the day of the *Manjah* she is excluded from the sight of all her own relations, her mother, her sister, and her own immediate servant excepted; and she must constantly sit closely veiled in a corner of the room. After the ceremony of the *Manjah Khannah* the fathers of both parties give entertainments to their respective relations and friends, to whom letters of invitation have been sent; and they must have dances and other ceremonies in their own houses until the day of marriage.

When three days only remain previous to the marriage, the first is called the day of *sháde*, and also of the *sáhhik*; first, because a canopy is erected in a court belonging to the house of the bride's father for the male guests: secondly, because the bridegroom performs the ceremony of the *sáhhik*; that is, he sends at night certain *sáhin*, or earthen vessels, in which sweetmeats are enclosed, on trays ornamented with flowers, and cups made of painted paper and talc, attended by a procession of his relations, friends, and guests, with illuminations and music, to the house of the bride. These vessels are delivered at the door, and the party who conveyed them either return that night, or remain until the next day, as may be most convenient to them. The second day is termed *Hernabondi*. In the morning the funeral prayers are read in honour of their ancestors, and at night the bride's father has leaves of a plant called *Maindi*, or *Henna*, pounded and put into gold or silver vessels, placed on litters ornamented with painted paper and talc, which he sends in great state by his relations and friends, accompanied by a procession of music and illuminations, to the house of

the bridegroom. Some of the principal persons attending the procession, colour the bridegroom's hands and feet with the *Maindi*, and return in the same order as they came.

On the third day, which is distinguished as the day of marriage, the bridegroom's father prepares the *Bárát*, or marriage procession. A great number of persons, such as the relations, friends, guests invited, and as many more as can be collected, form the *Bárát*. The bridegroom is bathed; a thread, in which knots are tied to guard him from inauspicious omens, is put into his hand; he is then dressed in coloured garments, with a *Sirpaich* and other ornaments on his turban; wreaths of flowers, gold and silver twist, and pearls are put on his neck; and gold and silver rings, such as are worn on the wrists, are suspended by a wreath of brocade from his turban. He is mounted on a horse, and proceeds with great pomp, and by slow degrees, attended by illuminations, fireworks, drums, and other music, towards the house of the bride. Should they have any distance to go, the principal persons forming the procession are mounted on elephants, on horses, and in palankeens; but if the bride's house is near their own, they proceed on foot. When the procession arrives the bride's father receives them, and conducts them to the canopy, where sherbet is distributed to all present; then the attendants on the bridegroom deposit trays containing clothes, jewels, rings to be worn round the ancles, and various other articles, to be presented to the bride; also fruits, scents, and spices, such as nutmegs, cinnamon, cloves, mace, saffron, &c. carefully wrapped up in separate folds of paper. One of the relations of the bride, her brother or her cousin, goes, with her father's consent, to the female apartments, and seating himself close to the curtain, behind which she is concealed, he reads to her the four articles of faith, and explains what is the custom of the family in regard to her marriage settlement. On obtaining her consent to the marriage he returns to her father, and informs him that every thing has been conducted according to the law. The bride's father places a costly robe, made of brocade or flowered muslin, with ornaments according to his means, wreaths of flowers, various kinds of cloths, a pair of shoes ornamented with gold and silver foil, a pearl or a gold ring, and *pauns*, on trays arranged in proper order: these he sends to the bridegroom under charge of a respectable man, who is denominated the agent of the marriage, accompanied by two confidential persons as witnesses to his being the agent. When this agent arrives at the place where the bridegroom and the persons of the procession are

assembled, a tailor, on the part of the bride's father, puts the robe on the bridegroom, and a gardener adorns him with wreaths of flowers; after which they receive presents and retire. The marriage agent then presents himself before the bridegroom, to whom he pays his respects, and explains the object of his mission, saying, "I am deputed to adjust the marriage settlement of such a one, the daughter of such a one (mentioning the name of the bride and her father), who is to be married to such a one, the son of such a one, do you know me?" If the bridegroom acknowledges that he is acquainted with him, it is not necessary for him to prove that he is the agent; but if the bridegroom denies having any knowledge of him, as is usually the case, he must then prove his agency by the evidence of the two witnesses. They next proceed to fix the amount of the marriage settlement, according to the custom of their respective families, and which must not be less than forty thousand,* but as much more as possible. If the fathers of the bride and bridegroom agree to the amount thus fixed, the marriage settlement is drawn up in legal form, signed and sealed by the bridegroom, and witnessed by all present; then the *Cáwzé*, or if he is not present some other learned man, reads the prayers. If they are of the tribe of the *Shíyas* he reads the *Shíya*, if *Sunnies* the *Kútbeh*; after which *paun* and sweetmeats are distributed.

As soon as the marriage ceremony is concluded, the bridegroom, attended by his procession, the illuminations, fireworks, &c., goes to the outer door of the female apartments; he there alights, and proceeds alone to the door, where he is met by a female servant, who presents to him a cup of sherbet and some *paun*. He drinks the sherbet, and having delivered such presents as he has brought, he returns to the canopy. The father of the bride then has an entertainment served to his guests, who continue under the canopy during the remainder of the night. Early in the morning the servants of the bride's family bring cups of milk, in which sugar has been mixed, on trays, and present them to the bridegroom, who tastes a little of the milk, and divides it among his brothers and the other children present; the bride's father has fruits and sweetmeats served to his guests. The bridegroom is now summoned to the bride's apartment, into which he enters alone; from

* Of the current coin of the country. The natives of India generally fix on an immense sum to prevent a divorce; because, if a man divorces his wife, he must pay to her the full amount of her marriage settlement.

the outer door a piece of cloth is spread. There is not any fixed standard for the breadth of this cloth, but it must be long enough to reach from the door to the bride's bed, which is placed under a canopy erected in the court. The bridegroom is met at the door by the principal attendant and other women, who conduct him to the canopy, the women proceed before him singing, and the attendant, as she goes on, drops *pauns* on the cloth, which the bridegroom picks up one by one and gives them to the other women. In this manner he is conducted step by step to the side of the bed, where the attendant puts into his mouth a small piece of candied sugar, and desires him to sit down on a chair by the bedside. In the mean time the females of the family go into the bride's apartment; they adorn her with the bridal garments and jewels furnished by the bridegroom: when she is completely dressed they bring her out and seat her on the bed; but she is so closely covered up that no part of her can be seen. They then go through the ceremony of the looking-glass and the book. The bridegroom is placed on the bed by the side of the bride; one of the women opens a koran, and places it, with a large looking-glass, before them, while another, raising the bride's veil, desires them to look at the book; and the bride and bridegroom then see each other's face for the first time reflected in the glass. This ceremony is not practised on all occasions; some people, after placing the bride on the bed, and seating the bridegroom on a chair by her side, hold a large cloth as a screen between them; they remove and replace the cloth seven times, that the parties may have an opportunity of seeing each other; and each time the cloth is replaced the women make offerings in money to the bridegroom. These presents are carefully collected, and conveyed with the bridegroom when he returns to the assembly of his relations; when the father of the bride and his relations make presents of money and other articles of value to the bridegroom. When all these ceremonies are concluded the bride's father presents to the bridegroom all kinds of cooking utensils, male and female slaves, money, and other things, of which a written account is given to him, and the bride is conducted in great state to the house of her husband. On their arrival the bridegroom's father distributes presents among his guests and dismisses them.

The females of the bride's family, and her relations, make presents to her the first time they see her after her marriage. During three days after her arrival at her husband's house she is carefully concealed from the females of his family; she constantly sits in a corner of the room closely veiled and

with her eyes shut, and during that period she must not on any account whatever look at or converse with any one. On the fourth day her husband's relations and her own family come to visit her; they lift up her veil, look at her, and make her presents in money and jewels according to their means. A few days after this the bride's mother sends her servants and other women with sweetmeats, and to invite her and her husband to her house; these persons remain that night at the bridegroom's house, and conduct him and his wife in the morning to her mother, with whom they remain nine days. On the morning of the tenth day the bridegroom's father sends his relations with presents of sweetmeats to the bride's mother; these persons stay two days, and then return with the bride and bridegroom, provided the bride's mother consents to her departure; if not, she remains with her mother for as long a time as may be agreed to by her husband.

The natives of India often expend such immense sums of money on the marriage of their children, that their families are reduced to poverty and distress.

IX.—*A Dissertation on White Elephants.*—By Captain JAMES LOW,
Cor. Mem. R. A. S.

Read February 19, 1831.

THE existence of perfectly white elephants has been called in question by many; and it was long supposed that the kings of Siam imposed on the credulity of foreigners, and that the light colour of the elephant was artificial. No doubt can now remain respecting the existence of this deviation from the common course of nature. In the stables of the king of Siam there are elephants, the colour of which, although not pure white, is yet sufficiently light-coloured to admit of the appellation they have received being with propriety bestowed upon them. Strangers at Siam are taken to see these elephants, and no mystery is made respecting them.*

I am not aware that any elephants of a colour even approaching to white have been discovered in Hindustan.

Although we have every reason for supposing that the white elephants are *not* of a distinct species, yet there is nothing which, physically considered, ought to weigh against such a supposition, and there is much which analogy might bring to its support; particularly as we know that the variety in the colour of perhaps all domesticated animals has been owing to the care and art of man, and that he has the power thereafter of causing any one colour to be perpetuated in preference to another.

In the Indian Archipelago there is the white buffalo, or *Kurbañ putih*, which is a very powerful animal. Its colour is a dingy white, or white and

* Mr. Crawford, in his Mission to Siam, describes having seen six of these in the king's stables, a larger number than were ever before collected there. "They approached much nearer to a true white colour than I had expected; they had indeed all of them more or less of a flesh-coloured tinge, but this arose from the exposure of the skin, owing to the small quantity of hair with which the elephant is naturally covered. They showed no signs of disease, debility, or imperfection; they were of the ordinary stature." P. 96. "The rareness of the white elephant is no doubt the origin of the consideration in which it is held." P. 97. They have also a white monkey.

red mixed. It is of a distinct species from the black buffalo. The Malays do not relish its flesh, although not apparently differing from that of the other, and say it is unwholesome.*

From inquiries made amongst the Siamese, I find that they are not aware, and indeed do not believe, that a herd of white elephants has ever been met with. Those which, at wide intervals of time, their hunters have secured in Cambaya and Laos, are termed by them *P hrìya p ho-àk chang*, or "kings of herds;" because found singly amid herds of the common black elephant, or *chang dam*. In 1823 one of the white elephants in the king's stable was a female.

The curiosity as well as the cupidity of the Siamese would have led them to an endeavour at rearing a variety in such high request amongst themselves and several Indo-Chinese nations, had not their religion opposed an insuperable obstacle. As these white elephants are sacred, the Siamese believe that dreadful calamities would overtake their country, were they to allow the males to copulate with the females.

That the elephant will breed in a domestic state is now sufficiently ascertained, and it is only surprising that it was not so very long since. The Quidah people, in the neighbourhood of Prince of Wales' Island, are in the habit of keeping brood elephants, and find no difficulty in rearing the young.

The Siamese informed me that one of their male white elephants came from *P hok hiau*, a mountain in South Laos; another from *Matta bang*, a term applied by the Siamese to part of Cambaya; and a third came from *Che-ung Mai*, in North Laos.

The exceeding degree of veneration in which the Siamese hold the white elephant will be best explained by my giving an account of their treatment

* Mr. Kendall, in the 87th No. of the Asiatic Journal, in treating of the true history of the wild sheep, has made some remarks which may be applied to this subject. He observes, that in every species of animal of which the usual colour is *not* white, nature occasionally presents us with white specimens; thus we have white oxen, white deer, white ravens, and white sparrows, &c.; and even amongst the human species Albinos and white negroes.

This occasional whiteness produced in a state of nature is the result of a faulty constitution of the individual animal.

In so far as respects the white buffalo we cannot apply Mr. Kendall's remarks, but they may with propriety be considered applicable to the white elephant, until facts shall be adduced to establish it as a distinct species.

of that one which was brought from Cambaya, which I circumstantially took down from the mouths of well-informed natives of *Bangkòk*.

This elephant was met on its journey to the capital by a deputation of Siamese courtiers, sent by the king to congratulate him on his entry into his majesty's dominions. He was then greeted by a deputation of worthies from the town *Dan Houlamán*. The next stage was *Sala K hru*; then *P hī-hang Dìng*, where the governor, or *P hrià*, of *K hannyōk*, paid a congratulatory visit; next *Dan Moo-rìng Thén* to *Nā lung*; thence to *Bā p hong*, where the governor of *Yuthā* paid his humble respects; thereafter to *Sāmk hōk*; next *Mu ring Nou*; and then to *Wat k hang k hàu*, or the "*Flying Fox Monastery*."—Here the king of Siam came to meet the sacred animal. The expression of the Siamese on this and similar occasions is, *Phreea cha det cha song P hra tamnoon t hǎäng P hra chonna mak rap P hreea Baromma chakt han*.

From this it is evident that the king deems himself inferior in degree to this elephant; and we are further furnished with another reason for the existence of this whimsical superstition. *P hreea Baromma chakt han* was, the Siamese say, a king of CHET UDÀN.

But to proceed, the sacred elephant was taken from *Wat k hang k hàu*, and conducted by the king to his capital of *Bangkòk*; a splendid festival was then proclaimed to be held in the open air near the palace.

This festival of the white elephant happens only when one is newly caught. There is a regular day or period set apart every three months at which he receives the attentions of the pious.

The high priests attend to regulate the ceremonies and recitations from the Bali books appropriated and suited to the occasion. Prayers are offered up for a long life to this *elephant king*, the priests all the while sprinkling holy water over his body.

When a newly-caught elephant reaches the capital he is consecrated by the priests, and then has a stall prepared for his reception in the *Chang Rung*, or elephant stable; where, except when taken out for exercise, or to lead processions, he lives the remainder of his life on the *contributions* levied by the king for his support.*

* M. De la Loubere has only casually alluded to the white elephant, by observing that the king never rides upon it, because its rank is equal to his own. Kœmpfer makes no mention of the white elephant.

PHRA SOWAT, a king of *Uluṃ pancha*, dreamed that a flower of the lotus fell into his hand.

The fortunate hunter who caught the animal is permitted to draw out a certain portion for himself of money from each of two heaps, the one of gold the other of silver.

In a drawing in my possession of the Chinese *quinary* assemblage of deities, one of them is depicted as riding on a white elephant.*

Amongst the seven precious things which belonged to BAROMMACHAK, or CHAKKAPHATTA, was (according to the *Bali Milinda*) the famous *diamond elephant*, whose lineage may be traced from the *Chatt,han*, king of elephants. The Solar race had the appellation of "lords of the forest," meaning elephants, in contradistinction to the Lunar race, or "crocodiles," "lords of the waters;" and, at the death of AMENON, the sovereignty of the world is figuratively said to have passed from the crocodiles to the elephants, A.M. 1204.

SESONCHORIS, or SESOSTRIS, who was chief of the elephants, and son of AMANEMES, conquered the world. And MANETHON says, that the fifth Egyptian dynasty was of elephant kings.†

It may not seem here out of place if a few remarks are made regarding

Next day the soothsayer told him that he must go to a distant forest to search for a princess called PRATHOM. He set off on a flying Pegasus, and met with the princess; and was married to her by a *Rishi*, her father. The happy couple were next day walking in the forest, when a *Phràn* or bowman (hunter) of the Raja killed PHRA SOWAT, and carried off his wife. The *Rishi* found the body, which he restored to life, by anointing it with holy oil. The Raja then went in quest of his wife, carrying with him some of the oil. He found a white elephant which had just been killed in a rencontre with a black one: and anointing the body restored it to life; and it then obtained the victory, and regained its attendants from the black one. The Raja then mounted the white elephant, and proceeded to the temple *Wiman nam krot*.

According to Maurice, armies of elephants (or men riding on elephants) mark the progress of CRISHNA through the Thebaid and *Ethiopia*. And from the late Colonel Wilford's learned Essays we find, that a river of *Sanka Dwîpa* (supposed by him to mean Egypt) flowed from the temples of a huge white elephant. CRISHNA slew him after a combat of six days, and a beautiful *Yaksha* sprung from the decapitated trunk.

* Sir W. Jones describes the eight gods, who guard the eight quarters of the world, as borne on elephants. The elephant's head, or mouth, gives birth to one of the great rivers of Hindustan.

In the Asiatic Researches also, we find it stated that VISWA DHANVA, son of KAMADEVA, saw in the *Himala* a white elephant of great size, having four tusks, which he chased to the burning sands of *Barbara*, and there slew; when a beautiful youth sprung from the mangled body, after having first assumed the appearance of a gigantic *Racshasa*. (*Vide Asiatic Researches*, vol. iii.)

† Key to Hindoo Chronology.

the Albinos, which are found among the nations of this quarter of Asia. I had the opportunity of seeing on the island of Pinang, or Prince of Wales' Island, a Malay of this description. *Albinos* are to be met with in Siam, Pegu, and Patani, and, in all probability, over the whole of these countries. The Siamese term them, *Khon phu-uk*, *i. e.* "white people;" and look upon them much in the same light as we do, considering the cause of the peculiarity to be in a defective organization.

MUHAMED TAHIR, the Malay alluded to, paid me a visit at my request, and readily replied to the questions put to him. His conversation betrayed no imbecility of intellect; while a stout-built frame, and stature of five feet six inches, shewed that colour with him was not a source of bodily weakness. He is about forty years of age, and was born in the principality of Quidah, or *Keddah*. His skin much resembles that of a red-haired and florid European. The proportion of the red mixed with the white is rather the largest, so that, except from the Malayan features and dress, any one unacquainted with the circumstances might easily mistake him for an inhabitant of the northern climates of Europe.

He has, however, the defect which seems to attend the Albinos in other regions, for he is short-sighted, and has weak bluish eyes. The hair both on his head and body is of a silvery white.

He described himself to be one of a large family, and two of his sisters to be Albinos. He is married, and has children of the common Malayan complexion. He follows the profession of a schoolmaster.

X.—*A Sketch of the Constitution of the Kandyan Kingdom. By the late Sir JOHN D'OYLY.—Communicated by Sir A. JOHNSTON, Vice-President, R.A.S., F.R.S.*

Read May 7, 1831.

To GRAVES C. HAUGHTON, Esq., M.A., F.R.S., Honorary Secretary to the Royal Asiatic Society.

19, Great Cumberland Place,

SIR :

December 31, 1831.

I beg leave, in answer to your letter of the 17th instant, to submit it as my opinion to the Council, that the Account of the Constitution of the late Government of the Kingdom of Kandy is of sufficient interest to be published in the Proceedings of the Society.

It appears, as well by the English translations which I caused to be made while I was on Ceylon of the three most ancient histories of that island, the Mahavansi, the Rajavalli, and the Rajaratnacarri, as by the several histories of the ancient kingdoms of Madura, Ramnad, Tanjore, and Trichinopoly, formerly situated in the southern part of the peninsula of India, that between four and five hundred years before the Christian era, a prince of the royal dynasty, then known by the Hindu historians as the Pandæan Dynasty, and then reigning over that part of the peninsula described by Ptolemy under the name of the *Regio Pandionis*, crossed over from the peninsula to the island of Ceylon; and finding it thinly inhabited, established a colony of his own people in the interior of the island, and introduced amongst them the same form of government, the same laws, and the same institutions as prevailed at that time in his native country. It further appears by the same ancient authorities, and by many modern histories in my possession, that this form of government, and that these laws and institutions, had never been altered or modified by any foreign conqueror, but had continued to prevail in their original state, from the time they were first introduced into the interior of Ceylon, till the year 1815, when the kingdom of Kandy was conquered by the British arms, and when this account of its ancient government was drawn up by the late Sir John D'Oyly, then chief civil officer of the British government in the town of Kandy, from the information of the principal officers of the former Kandian government, who at that time had no motive to suppress the truth, and were perfectly competent to give him an authentic account of all that related to the nature and the constitution of their former government.* It therefore may be considered to be an authentic account, not

* The Mahomedans, although they conquered the whole of the peninsula of India, did not extend their conquests to the island of Ceylon.

only of that ancient form of government which had prevailed in the interior of the island of Ceylon, without any material alteration, for upwards of two thousand two hundred years, but also of that which prevailed so far back as the very commencement of that distant period throughout the peninsula of India, and to afford a very valuable picture of one of the most ancient forms of government established in Asia.

The late Sir John D'Oyly and I were engaged, the whole time we were together on Ceylon, in inquiring, amongst other objects of literary and antiquarian curiosity, into the numerous remains which are still to be found in every part of the island of ancient Hindu history, laws, customs, manners, science, and literature.* Although I possess a great many different accounts of the Kandian government, laws, and institutions, some of them drawn up while the Portuguese and the Dutch held establishments on the island, and some since the English have been in possession of those establishments, I have none which give so accurate and so detailed a view of that government, and of those laws and institutions, as the one drawn up under the circumstances I have mentioned by Sir John D'Oyly; and it was for this reason that I took the liberty, the year before last, of presenting it to the Society.

Conceiving some time after that the Society might be precluded, by its length, from

* I particularly directed my researches to such parts of the history and of the antiquities of the island as were connected with the state of the country between the third and the thirteenth centuries of the Christian era, when the immense tanks or reservoirs of water, called Kattocarre, Padwelcolom, Minerie, and Kandeley, in the northern districts, and the three large tanks in the eastern districts, together with between three and four thousand smaller tanks, were kept in perfect repair by the then government of the island, and formed as grand and as beneficial a system of irrigation as ever prevailed in any country, not excepting even Egypt, while the celebrated lake Mœris was in use for regulating the inundations of the Nile.

My view in instituting these inquiries was to obtain for his Majesty's Ministers such information as might enable them to carry into effect a plan which I proposed to the late Lord Londonderry, the then Secretary of State for the Colonies, in 1809; the object of which was, to encourage European capitalists, by giving them grants upon the most advantageous terms of such of the government lands as were in former days highly cultivated though at present completely waste, to introduce into Ceylon European capital, European industry, and European arts and sciences, and thereby restore the population, the agriculture, and the commerce of the island to the state of prosperity which they had attained when Ceylon, according to the concurrent testimony of historians, had a population of between four and five millions of inhabitants, a system of agriculture which enabled it to supply not only its own but the population of neighbouring countries with rice and many other descriptions of grain, and a system of commerce which made it, for many centuries, the great emporium of all the trade which was carried on between the western and eastern portions of the globe.

See the different papers upon this subject given by me to the late Lord Londonderry in 1809, and to Lord Goderich in 1831; and also my two papers in the Proceedings of the Royal Asiatic Society: the one on a Cufic and the other on the Trincomalee Inscriptions.

publishing it in their proceedings, and fearing that if not published it might, from remaining in manuscript, be mislaid and ultimately lost to the public, I lent a copy of it to the Editor of the Asiatic Journal, for publication in that work; I however find that he has only been able to give a general view of the constitution of Kandy, and therefore that what is already in print on the subject does not supersede the necessity of publishing the whole details of an account which affords so minute and so curious a description of every part of that constitution of government, as in force and as administered, up to the very day upon which the Kandian country became a portion of the British territories on the island of Ceylon.

I have the honour to be,

SIR,

Your most obedient and faithful servant,

ALEXANDER JOHNSTON.

SKETCH

OF THE

CONSTITUTION OF THE KANDYAN KINGDOM.

THE power of the King is supreme and absolute. The ministers advise, but cannot controul his will.

The King makes peace and war, enacts ordinances, and has the sole power of life and death.

He sometimes exercises judicial authority in civil and criminal cases, either in original jurisdiction or in appeal.

The acts of his government are presumed to be guided by the institutions and customs of his kingdom.

Before innovations of importance are carried into effect, it is customary to consult the principal chiefs, and frequently the principal priests; and when other matters of public moment are in agitation, the same persons are usually called to councils.

The authority of the King is exercised through many officers of state.

The principal officers employed in the administration of public affairs, are the three *Adikarams*, commonly called *Adikars*.

The *Desaves*, or governors of provinces, chiefly situated below the mountains.

The *Likams*, or chiefs of departments within the mountains.

The *Rate Mahatmeyo*, or governors of smaller districts above the mountains.

The officers attached to the King's household, the chiefs of departments employed in his personal service, and the principals of temples, attend also on many public occasions, and, in some instances, take rank above a part of those just mentioned ; but, for the sake of distinction, will be separately described after them.

The officers are either chiefs of provinces or villages, possessing jurisdiction in their certain local limits, or chiefs of departments possessing jurisdiction over persons dispersed in different districts or villages.

They possess universally authority, both executive and judicial, within their respective jurisdictions ; two or more offices are sometimes conferred upon the same chief.

They receive no stipends, but are entitled to sundry emoluments from the persons under them ; and, in consideration thereof, pay certain fixed annual tributes into the royal treasury.

The Kandyan chiefs, and all other subjects, on approaching the King, make obeisance by three prostrations, and receive all his orders and make all communications to him on their knees.

Adikars.

The highest officers of state are the two *Adikars*, called *PALLEGAMPAHE* and *UDAGAMPAHE*. They possess equal powers and privileges within their respective jurisdiction, but *PALLEGAMPAHE Adikar* has the precedence.

By inferior chiefs and people they are distinguished by the more honourable appellation of *Maha Nilame*, or great officer.

The persons subject to the peculiar jurisdiction of the *Adikars* are :

The *Katubulle* people, or the messengers who convey the King's and *Adikars'* orders, and summon persons requiring to attend them. They are constantly on duty, part at the palace and part at the *Adikars'* houses, and are relieved every fourteen days, with their head-man, called *Korleatchile*.

The *Kasakara* people, or whip-crackers, who crack whips before the King and the *Adikars*, whenever they move abroad. They are of the same class with the *Katubulle*, and sometimes perform either duty ; two come on duty at a time, and are relieved in like manner with the *Katubulle*.

The *Rekawallo*, who keep guard at the great gaol in Kandy, and have general charge of the prisoners, and execute criminals condemned to death.

The *Rekawallo* of PALLEGAMPAHE and UDAGAMPAHE serve alternately, and are relieved every fifteen days, with their head-man, called *Darrega*.

The villages of the *Katubulle* and *Kasakara* people of PALLEGAMPAHE, and their numbers, are as follow :—

Ampitye	...	22	;	under the orders of a head-man, called <i>Korleatchile</i> .
Dehideniye	...	10	..... ditto	..... ditto
Mavilmada	...	15	..... ditto	..... ditto
Owisse	.....	8	..... ditto	..... ditto
Allatgame	}	22	..... ditto	..... ditto
Alipalla				
Allatgame	}	22	..... ditto	..... ditto
Gampalla				

They attend on duty in rotation, with their *Korleatchile*, according to the above three divisions, each having fifteen days of service and thirty days of rest ; such persons of each division as fail in personal attendance, pay one *ridi* (about 8*d.*) each, of which two are allowed to the *Korleatchile*, and the rest are the perquisite of the *Adikar*.

The *Korleatchile* are nominated annually by the *Adikar* from certain *Katubulle* families, and pay from five to fifteen *ridi* each for the appointment.

The villages of the *Rekawallo* of PALLEGAMPAHE, and their numbers, are as follow :—

Wilane	...	1	head-man, called <i>Duraya</i> , and 11 men.
Mahiyawe	1	..... ditto	..... and 2 men, there were formerly 7.
Walababawe	1	..... ditto	..... ditto
			..... ditto
			..... 5.

They attend on duty with their *Duraya* in rotation, according to the above three divisions, fifteen days at a time, but alternate with those of UDAGAMPAHE ; since the numbers of the last two villages have been reduced, they assist each other when their turn occurs. They are under the orders of a *Hirage Kankan*, appointed annually from the *Korleatchiles*.

There are besides at Alutgam one *Binne Aratchy* and thirty-two men, who perform no public duty as above, but pay certain dues to the *Adikars*, and a part of them are liable to occasional work.

The villages of the *Katubulle* and *Kasakara* people of UDAGAMPAHE and their numbers are as follow :—

Peradiniya	8	} Under the orders of a <i>Korleat-</i> <i>chile</i> .
Kotmale and } Pussellawe }	attached to Peradiniya, 18	
Mulgampola	14	; under a <i>Korleatchile</i> .
Bowale	15	; ditto.
Dodanwele	16	} ditto.
Toupanahe attached to ditto	6	

They attend on duty in rotation, according to the above four divisions, having fifteen days of service and forty-five of rest. The absentees pay a half-*ridi* each, of which two are allowed to the *Korleatchile* and the rest belong to the *Adikar*. The *Korleatchiles* are appointed annually, and pay ten *ridi* each.

The villages of the *Rekawallo* of UDAGAMPAHE and their numbers are as follow :—

Mapanawatura	1	<i>Duraya</i> and 4 men.
Egodamura in Ataragam and Halolawe; 1 ditto	6	ditto.
Kahalle	1	ditto

They attend on duty in rotation with their *Duraya*, according to the above three divisions, fifteen days at a time, but alternate with those of PALLEGAMPAHE. They are under the orders of a *Hirage Kankan*, appointed annually as above.

There are also one *Hewa Duraya* and eight men of *Gahalagamboda*, and one *Duraya* and eight men of *Atabage*, who are obliged to perform certain menial service under the *Adikar*.

The police of Kandy is under charge of the *Adikars*. For this purpose the town is distinguished into two parts by a line drawn through the middle of the street, called *Swaruakalyanawidiga*; the northern division being under the orders of PALLEGAMPAHE *Adikar*, and the southern division under the orders of UDAGAMPAHE *Adikar*; formerly the two *Hirage Kankan*, and within the last few years of the deposed King's reign, four *Widiya Aratchies*, acted as police officers under them.

The *Maha Hirage*, or great gaol in Kandy, is under charge of the *Adikars* and of their immediate officers, the *Hirage Kankans* and *Rekawallo*, alternately for fifteen days, as above stated.

The ferries on the great river of *Alutgantolle*, *Lewelle* (and formerly *Kundasala*), are under the charge of *PALLEGAMPAHE Adikar*, and subordinate to the *Adikar* of the *Hirage Kankan*. There is one family at each ferry, who, according to the circumstances, paid annually from ten to fifty *ridi* each to the *Adikar*, and five to the *Hirage Kankan*. *Dhonies* are furnished by certain villages in *Dumbere*.

The ferries of *Ganoruwe* and *Katugastolle* are under the charge of *UDAGAMPAHE Adikar*, and subordinate to the *Adikar* of the *Hirage Kankan*. At *Ganoruwe* the duty is performed by two or four inhabitants of the neighbouring village, who pay annually from 300 to 500 *ridi* to the *Adikar*, and 40 or 50 to the *Hirage Kankan*. The *Dhonies* are furnished by the four *Katubulle* villages at *Udagampahe*. At *Katugastolle* the duty is executed by three or four *Rekawallo*, who pay annually from 400 to 600 *ridi* to the *Adikar*, and 150 or 200 to the *Hirage Kankan*. The *Dhonies* are furnished by the people of *Harispatta*.

The ferrymen enjoy no lands for this service, but make the above payment in consideration of the profits.

All persons pass the ferries to Kandy free of payment. Persons passing into the country from Kandy pay one pice or four *challies* each, with the exceptions of persons attached to the King's household; of great chiefs and priests, with their followers; of messengers proceeding on duty; and of persons who, according to custom, deliver annually to the ferrymen at harvest-time a certain quantity of paddy, or other produce, in lieu of payment every time; and of the inhabitants of *Harispatta* and the hither part of *Dumbere*, who furnish *Dhonies*: the former to *Katugastolle*, the latter to *Alutgantolle* and *Lewelle*.

The *Adikars* also possess a general jurisdiction over the whole of the Kandyan provinces, according to the following partition:—

A part of the western, the northern, the eastern, and part of the southern provinces, are subject to the authority of the first *Adikar*, consisting of the seven *Korles Uwa*, *Matele Walapane*, *Wellasse*, *Bintenne*, *Nawerekalawiga*, *Tamankada*, *Harispatta*, *Dumbere*, and *Hewaheti*.

The greater part of the western and southern provinces are under the authority of the second *Adikar*, consisting of the four *Korles*, three *Korles*, *Saffragam Korles*, *Udapalata Udanawere*, *Yatenawere*, *Junpanahe Kotmale*, and *Bulatgame*.

This jurisdiction, however, is of a very limited nature, and is exhibited principally in the following instances :—

The *Katubulle* messengers of PALLEGAMPAHE convey orders and summon persons within all the provinces belonging to the first division.

The *Katubulle* messengers of UDAGAMPAHE within all the provinces of the second division ; and never *vice versa*, except that, when an urgent order is to be expedited, or when a first order has been disobeyed, two messengers, one from each class, are despatched together.

When in any civil or criminal case, which is difficult of decision, the chief of a province or department makes reference for advice, or when the parties themselves complain, the *Adikar*, within whose jurisdiction the case arises, hears and decides, or refers to higher authority.

When any matter not judicial, or any difficulty in the execution of his duty is brought to notice by the chief, or by others, the *Adikar*, within whose jurisdiction it occurs, gives his councils aid and support, or, if necessary, refers it to higher authority.

The fee of two *ridi*, paid upon discharge by prisoners confined in the *Maha Hirage*, is the right of the *Adikar* within whose jurisdiction the prisoner is an inhabitant.

The written oaths for swearing by oil, are granted by the *Adikar* within whose jurisdiction the case arises, in the districts situated within the mountains.

Honours and Privileges.

In the King's presence, and on all other public occasions, the two *Adikars* have the precedence.

The *Adikars*, whenever they move, are preceded by persons cracking whips.

No person can remain in the verandas of houses, and all must give way as they pass.

No person, of whatever rank, below the royal family, can sit when the *Adikars* are standing.

No person can ride on an elephant, horse, or in a palanquin, whilst the *Adikars* are on foot.

If a *Desave* visit the *Adikar* in his *desavony*,* he must cease beating tomtoms within sight of his residence.

* District.

If the *Adikar* pass through the *desavonies* of another, he precedes, and the *Desave* follows two or three miles behind with tomtoms.

The *Adikars* cannot use tomtoms in Kandy, nor in any other province than their respective *desavonies*.

Without special leave they cannot ride in palanquins, on an elephant or horse within the river, nor any where in attendance on the King.

When the *Adikars* are at the palace all public communications to the King are usually made through them.

The King's orders for performing public works at the palace in Kandy, or in the country, are usually conveyed to the proper chiefs and authorities through the *Adikars*.

The King's general orders to the people are communicated to the inhabitants of Kandy, and to the head men of the provinces residing in Kandy, by the *Adikars*.

The King's orders are conveyed to chiefs resident in the provinces by *olas*, written to them in the name of the first *Adikar*, if he be in Kandy; in his absence by the second *Adikar*, and, in the absence of both, by the chief next in rank.

The *Adikars* are particularly charged with conducting the public festivals and the repair of temples, the catching of elephants in Kandy, and personally superintending these and other public works.

They are charged with the repair of the streets, and with every work contributing to the beauty and cleanliness of the town.

In superintending the performance of any of these works in Kandy, they have power to imprison and punish any head men of the provinces for neglect or disobedience, except persons belonging to the King's household or court, and those only upon representation to the King.

When cases of importance are heard by the King himself, or by the Great Court, the *Adikars* are present.

The *Adikars* hold the first seats in the Great Court of Justice called *Maha Naauwa*, take the leading part in the proceedings, are the principal reporters to the King, and give the *sitta* or *ola* of decision.

All sentences of corporal punishment by the King's orders are executed in their presence.

In suits of land the *Adikars* have power to sequester lands and crops.

The *Adikars* have the exclusive power of causing punishment to be inflicted with the cane.

They have the exclusive power of granting the written oath for swearing by oil, and of granting the written decrees called *sitta*, in all cases which arise in the districts situated within the mountains.

The *Adikars* are usually consulted by the King upon the appointment of all other chiefs, upon the appointment of chief priest, upon grants of lands, or rewards for services.

Grants of lands by the King's orders are signed by the *Adikars*.

Sannasses, or royal grants, are delivered to superior favourite chiefs by the King himself; the same to all other persons by the *Adikars*, in the King's presence.

The ceremony of conferring titles, by tying a metal plate on the forehead, is performed according to the same rule.

A cane, curved at the top, is the *Adikar's* peculiar staff of office, and is delivered into their hands upon their appointment. It was formerly a painted cane with silver head and ferrule, but a cane entirely cased with silver was adopted by the deposed King.

The *Katubulle* messengers carry in their hands, as an emblem of office, a silver-headed cane, curved at the top.

When they carry the King's orders to a *Desave*, residing in his *desavony*, they receive, besides provisions, five *ridi* in token of respect.

Wheresoever they go they are furnished with provisions *gratis*; and, excepting in the houses of persons of rank, a stool, or elevated place, is spread with white cloth, and their cane deposited upon it whilst they remain.

The *Katubulle* people annually deliver certain rice duties into the royal stores, called *Maha Gabadarwe*.

The *Adikars* pay annually into the royal treasury a sum of 500 *ridi* each, being their tribute called *Dakam*, in consideration of the privileges and emoluments above-mentioned.

When one *Adikar* is absent from Kandy, his ministerial duties devolve upon the other.

For the better support of their dignity, a *desavony* is usually conferred upon each *Adikar*, and sometimes other offices; in which case, besides the foregoing, they perform all the duties and enjoy all the honours, privileges, and emoluments of a *Desave*, or such other offices.

Division of the Kingdom.

The Kandyan kingdom consisted of twenty-one grand divisions, of which

the twelve principal are called *desavonies*, and the majority of the rest, rate, and they may properly be denominated districts.

The *desavonies* were each placed under the orders of a chief, or governor, called *Desave*, and are as follow :—

The Four <i>Korles</i> ,	<i>Walapana</i> ,
The Seven <i>Korles</i> ,	<i>Udapalala</i> ,
<i>Uwa</i> ,	<i>Nawerekalawiga</i> ,
<i>Matele</i> ,	<i>Wellasse</i> ,
<i>Saffregam</i> ,	<i>Bintenue</i> ,
The Three <i>Korles</i> ,	<i>Tamankada</i> .

The other nine districts were respectively under the authority of chiefs, who, except the two last, were distinguished by the name of *Rati Mahat-meya*, and are as follow :—

<i>Udanuwwere</i> ,	<i>Hewahete</i> ,
<i>Yatinuwwere</i> ,	<i>Kotmale</i> ,
<i>Tunpanahe</i> ,	<i>Uda</i> , or Upper <i>Bulatgame</i> ,
<i>Harispathu</i> ,	<i>Pata</i> , or Lower <i>Bulatgame</i> .
<i>Dumbere</i> .	

The Four *Korles*.

The provinces, or *desavony*, called the Four *Korles*, extend westward from the mountains which limit the high country of Ceylon to the frontier of the maritime provinces. Its mean extent, from east to west, may be estimated at about twenty-six English miles; from north to south about fourteen English miles.

It is bounded on the east by a range of mountains which separate it from *Tunpanahe*, *Yatinuwwere* and *Udapalala*, of which the principal points, extending south from *Alagolle Kanda*, are *Balani*, *Kande*, *Maragaha*, *Eyla*, *Kaduganawe*, *Nikahetiye*, or *Alpita Kande*, and *Ambulurwane Kande*.

On the south-east and south it is separated from *Dolosbage* by a branch of the same range, in which the principal hills are *Naalle Kande*, *Rahale-gale*, and *Murute Kande*.

On the south, from Lower *Bulatgame* and the three *Korles*, by a less mountainous limit, in which the principal points are *Alkedina*, *Gala Kaha-*

pitiyekele Henna, Etgale, Owita, Dunumadalagahagawa Henna, the Gravel of Kotikakumbure, on the great road to Colombo, Ilukmodere and Galapitamde.

On the west from the *Hina Korle* and *Hapitigam Korle*, by a line in which the principal points are *Tittawel, Makande, the Gravel of Dum-moladiniya, the Gravel of Wahawihawita, and Algam Kande.*

On the north from the seven *Korles* by the mountains *Parape Kande, Galadinikada Kande, Siruwangalla*, and the river *Maha Oye* which falls into the sea at the ferry of *Kaymel*, several miles north of *Negombo*.

The four *Korles* from which the province derives its name, and the smaller districts, *Pattu* and *Palata*, into which each *Korle* is divided, are as follow :—

1st. *Galboda Korle* contains five *Pattu* : *Galboda Pattu, Meda Pattu, Ganey Pattu, Egoda Pattu, Tanipperu Pattu.*

2d. *Paranakurua Korle, Maha Palata, Ganhate Palata, Kumbulgam Palata. Handupanduna Korle* is a part of *Paranakurua*, and consists of *Kandua Pattu, and Mawata Pattu.*

3d. *Kindigoda Korle* contains *Medde Medeliga Pattu, Walgam Pattu, Deyala Dahamune Pattu.*

4th. *Beligal Korle, Kerawale Pattu, Kandapite Pattu, Otara Pattu, Gandoloha Pattu.*

The several classes of inhabitants, the head men appointed over them, and the service and duties to which they are liable, are as follow :—

1st. The *Atapattu* people hold the first rank.

They are subject to the orders of five headmen, who cause all duties to be performed by them, viz. one *Atapattu Lekam* over the whole, and four *Aratchies*, one in each *Korle*.

The *Aratchies* are called also *Peramane Rale*, because they go in front immediately attending the great banner of the *desavony*.

The *Atapattu* people perform *Mura*, i. e. attend on duty at the house of the *Desave*, in rotation, according to the three following divisions :—

1st. Those of *Galboda Korle* and *Kindigoda Korle* together ; 2d. Those of *Paranakurua Korle* ; 3d. Those of *Beligal Korle*, and the term of duty is thirty days each time.

Thus every person is liable to one month of service and two of rest, or serves four months and rests eight months within the year.

The number of *Atapattu* people who actually come on duty varies, ac-

according to the exigency of the service, and the numbers liable; it is usually from about twenty to fifty.

The rest pay a fixed fine or commutation of money, called *mura ridi*, being two *ridi* each person for the fixed term of thirty days.

Of these defaulters, ten persons, or rather the commutation paid by them, are given up to the *Atapattu Lekam*, and five to the *Aratchies*. The rest is the perquisite of the *Desave*. But certain persons, who are opulent, in each *Korle*, are accustomed to deliver, instead of the *mura ridi*, a load of rice (equal to about twenty-five measures); and the *Aratchy* usually obtains rice from the five sufficient for his subsistence during his term of duty in Kandy.

The *Atapattu* people keep guard in a building appropriated to them near the *Desave's* house, called *Atapattu Madawe*, where they have in charge the great banner, the *Lekam Miltiye* (records), the *Mura Awnda* (arms), and have the custody of prisoners confined there.

Their principal duty is to convey the *Desave's* orders throughout his *desavony*, and to call all persons whose attendance he requires, either in judicial matters, or for service, or for the collection of revenues.

They attend the *Desave* wheresoever he goes abroad, and one of their number carries the great banner on public occasions, and the *Mura Awnda* when he goes to the palace or elsewhere.

Since the time of *Desave Leake* they have assisted in dragging timbers for public works, but it is not considered their proper duty.

They prepare withes, and weave *olas* when required for buildings.

They punish offenders with the open hand under the *Desave's* orders, and hold them whilst punished with rods by the *Koditawaka* people.

They gather and carry flowers and other offerings to the temples.

When the *Desave* first comes into his province, they all furnish him, one turn only, with *adakka*, or dressed provisions.

When the *Atapattu Lekam* proceeds upon service into any *Korles*, or the *Atapattu Aratchies* into their respective *Korles*, they are supplied with *adakka* by the *Atapattu* people.

The *Atapattu* people are not liable to the payment of *kada rajakareya* (provisions) or any other duties to the King.

The principal people of the *desavony* hold *Atapattu* lands; and, on account of its respectability, many persons belonging to the two classes

next mentioned have, by favour of the *Desaves*, been at different periods enrolled in this department.

2d. The *Gamwasam* people hold the second rank. They are under the orders of the head men, called *Korales*, *Kankans*, and *Atukorales*, who are appointed in the several *Korles* and *Pattus*, as follow :—

In Galboda Korle.

Galboda Pattu 1 *Korale*, 1 *Kankan*, and 1 *Atukorale*,
Meda Pattu 1 ditto, and 1 ditto,
Ganey Pattu 1 ditto, and 1 ditto,
Egoda Pattu 1 ditto, and 1 ditto, and 1 *Kankan*
 for the three last mentioned *Pattus*.

A *Mohottale*, whose peculiar duty it is to collect *pandura mila* (fines) and superintend the *Desave's Gabada gan* (farm).

Paranakurua Korle; 1 *Korale*, 1 *Kankan*, and 1 *Atukorale* over the three *Palata*.

A *Lekam*, who collects the *pandura mila* and superintends the *Desave's Gabada gan*.

Handupanduna Korle.

Kanduha Pattu 1 *Korale* and 1 *Kankan*,
Mawata Pattu 1 ditto and 1 ditto, and 1 *Atukorale* for the two *Pattus*.

Kindigoda Korle.

Medde Medeliga Pattu..... 1 *Korale*, 1 *Kankan*, and 1 *Atukorale*,
Walgam Pattu 1 ditto, and 1 ditto,
Deyala Dahamune Pattu ... 1 ditto and, *Atukorale*, and 1 *Kankan* for the two last *Pattus*.

A *Lekam*, who collects the *pandura mila*.

Beligal Korle.

Kirawale Pattu 1 *Korale*, and 1 *Atukorale*,
Kandupite Pattu 1 ditto, and 1 ditto,
Otara Pattu 1 ditto, and 1 ditto,
Gandoloha Pattu 1 ditto, and 1 ditto.

A *Mohottale*, who collects and sends the King's and *Desave's* revenues, and superintends the *desavony Gabada gan* villages in the whole *Korle*.

The *Gamwasam* people have no *mura*, or regular and constant rotation of duty at the *Desave's* house.

They drag timbers for the public service, or for the *Desave's* use, in Kandy or in the *desavony*, and for this purpose attend at such time and in such numbers as the occasion requires.

They deliver into the royal store, *Maha Gabadawe*, the duties called *rada ragakariya*. Each village being subject to the payment of a *kada*, or *pingo*. A *kirawala*, or half *kada*, according to a taxation in the *Lekam Mittiye*, or *Ola* record of the *Maha Gabadawe*. Each *kada* consists of twelve *neyli* (or measures) of rice and cocoa-nuts, and the *kirawala* is half that quantity.

In the greater part of the *Beligal Korle* this duty is paid in cash at the rate specified in the *Lekam Mittiye*, of twenty-two *taltia*, or pice, for one *kada*.

They deliver duties to the *Desaves*, called *walanive kada* provisions, precisely of the same nature with those payable into the *Maha Gabadawe*, but inferior in amount.

They pay annually to the *Desave*, *pandura mila*, being a duty of twenty *futta* per each *kada*.

Both the foregoing are payable from the *Korle Gamwasam* (official villages), and not from the *Minda Gamwasam* (private villages).

They furnish daily by rotation of *korles* and *pattus*, *adukku*, or dressed provisions, for the *Desave* and followers; and *peghidum*, or raw provisions, for the *Desave* himself, so long only as he is resident in the *desavony* upon service.

They furnish *adukku* (provisions) to their respective *Korales* whilst travelling within the *korle*, or *pattu*, upon public service, either collecting duties, or assembling people, or superintending their labours.

3. The *Hiwa*, or *Mohandiram Wasam* people.

They were originally under the orders of distinct *Mohandirams*, but of late years have in most instances been placed under the *Korles*.

The *Mohandiram* and the head men of this class are as follow :—

In *Galboda Korle*.

Galboda Pattu; 1 *Mohandiram*, which office is sometimes vested in the *Korale* and *Hewa Aratchy*.

Ganey Pattu and *Meda Pattu* ; 1 *Hewa Aratchy* for the two *pattus*, and sometimes one for each : the *Hewa Wasam* people being subject to the orders of the two *Korales*.

Egoda Pattu ; 1 *Hewa Aratchy* : the people being subject to the orders of the *Korale*.

Taneppera Pattu ; *Mohandiram* (who is also called *Korale*) ; 1 *Hewa Aratchy* and 1 *Atukorale Atchile*, appointed by the *Mohandiram* to convey his orders.

In *Paranakuraa Korle*.

One *Hewa Aratchy* over the *Hewa Wasam* people of the three *Palata*, who are subject to the orders of the *Korale*.

In *Handapanduna Korle*.

One *Aratchy* over the *Hewa Wasam* people of the two *pattus*, who are under the orders of the *Korales*.

In *Kindigoda Korle*.

One *Hewa Aratchy* for the *Hewa Wasam* people of the three *pattu*, who are under the orders of the *Korales*.

One *Mohandiram* and 1 *Hewa Aratchy* over *Hangawela Walpola Mohandiram Wasam*.

In *Beligal Korle*.

Four *Hewa Aratchies* (*i. e.* over the *Hewa Aratchy Wasam* people of each *pattu*, who are subject to the orders of the *Korales*), 1 *Mohandiram* (no *Aratchy* over the *Gardeye Mohandiram Wasam*), the people of which are dispersed in all the four *pattus*.

The *Hewa Wasam* people perform *mura* ; *i. e.* attend upon duty in rotation with their *Aratchies* according to the same three divisions of *korles*, and for the same periods as the *Atapattu* people.

The number of those who actually come on duty varies usually from * to * according to the exigency of the service ; the rest pay two *mura ridi* each in lieu of service, whereof two, three, or four are allowed to the *Korale*, or *Mohandiram* and *Aratchy*, one to the *Hewa*, or *Atukorle*, and the remainder is the perquisite of the *Desave*.

* Omitted in the MS.

They keep guard, not at the *Desave's* house, but at the *Danda Madurwe*, or building appropriated to the storing of the King's timber in Kandy.

They fell timbers in the forests for the King's or the *Desave's* service. Of late years they have been employed also in dragging or carrying timbers, but formerly it was not considered as their proper duty.

They cut wall timbers and plane them, and thatch public buildings, or the *Desave's* house.

They carry the *alkade*, or small banners, of the *desavony*, in public processions, and when the *Desave* travels.

They are not liable to the payment of *kada rajakareya*, or any other duties, to the King.

The *Kodituwakku*, or *Ginjal* people (artillery).

They are people of the low caste, called *Padawas*, and reside only in four villages; viz. *Kadagamma* and *Hewadewala* in the *Kindigoda Korle*; *Elagalla* and *Henapola* in the *Galboda Korle*.

The people of *Kadagamma* are under the orders of a *Mohandiram*, and of a head man of their own caste, called *Duraya*.

The people of *Hewadewala* are under the orders of a *Mohandiram*, and of two head men of their own caste, called *Maha Duraya* and *Hewa Duraya*.

The people of *Elagalla* and *Henapola* are jointly under the orders of a *Mohandiram* and a *Duraya*.

They perform *mura*, or attend on constant duty at the *Desave's* residence; with their respective *Mohandirams* and *Durayas*, in rotation, according to the above three divisions, for the term of thirty days each, and the absentees pay two *mura ridi*, which are applied in the manner above stated.

They keep guard at the building called *Koditawakka Madawe*, where the *ginjals* of the *desavony* are kept, and have custody of the more atrocious prisoners who are committed to them.

They are sometimes sent into the country to seize criminals and refractory persons; to carry *ginjals* before the *Desave* when he travels, and on all public occasions.

They dig and carry earth and stones, provide medicinal herbs when required from the jungle, and perform other menial labour for the King's or the *Desave's* service; but neither fell nor drag timbers, nor furnish firewood or water for his household.

Mohandiram.

The *Kala Hewa Mohandiram* people.

They are all *Padawas*, disposed in different villages, and subject to the orders of a *Mohandiram*, and, under him, of a *Duraya* of their own caste.

They attend on duty in Kandy once in three months, in rotation, with the two *Bulgamwala Mohandiram Wasam* people mentioned below, and serve three days at a time.

They perform menial labour for the King's or the *Desave's* service, which chiefly consists in bringing and preparing the domestic materials for buildings.

When the *Desave* is in his *desavony* they keep guard at a *gravet*, near his residence; when he travels it is their duty to move on both sides of his palanquin, in the jungle near the road; they execute condemned criminals (which rarely occurs) within the *desavony*.

The two *Bulgamwala Mohandiram* people.

They are of the low caste, called *Berawaya*, and reside in the four villages *Genihalpitiya*, *Ballatgomurwa*, *Fellake*, and *Kalahugoda*, in the *Paranakurua Korle*.

The two first villages are subject to one *Mohandiram*, the two last to another; but sometimes all four are placed under one head man of their own caste, called *Halawaliya*, who is appointed over them, one in each village.

They attend on duty at Kandy in rotation with the *Kala Hewa Mohandiram* people, and perform the same menial services for the King or the *Desave* as above stated, except that of executioners.

The people of the two first villages occasionally carry the hinder part of the *Desave's* palanquin.

Hitawidakarayo.

These are people of low caste, inhabitants of the five following villages, called the *Desave Gabada Gan*,* viz. *Pannenuwa Padidora*, *Mawana*, *Kawudawulle*, *Dorawaka*, *Ballapana*.

They are under the orders of five separate *Vidans*, appointed by the *Desave*, and of petty head men, *Durayas*, and *Halawaliyas*, of their own caste, within each.

* See p. 204.

One or two men from each village are constantly on duty at the *Desave's* house in Kandy, where a distinct head man, called *Hitawila Vidan*, is appointed to control them and superintend their work.

They are employed in many menial labours at the palace, or at the *Desave's* house, consisting chiefly in the repair and cleansing of buildings and courts. When an important work is undertaken, a greater number of the inhabitants are called to Kandy. They cultivate royal fields within their respective villages, as will be notified hereafter.

The Kottalbadde or Artificers' Department.

These persons have been sometimes placed by the King under the orders of a separate chief, called *Pata Rate Kotalbadde Nilame*, but now frequently are under the *Desave*, who appoints a *Vidan* over them.

They consist of the following classes :—

Seven *Wadawa* or carpenters, under the orders of a head man, called *Mulecharaya*, appointed by the King, upon the *Desave's* recommendation, who perform all carpenter's work for the King or *Desave*, and are usually employed at the *Dandu Maduwa* in Kandy. Five *liyana Wadawa* or turners. Five *Hittaru*, or painters. Fourteen *Iwadawa*, or arrow makers, under a head man called *Hangidiya*.

They manufacture and paint bows, arrows, spear shafts, banner staves, and walking sticks, and two of them perform service in the *Runawada Mandape* (royal store of arms).

Fourteen *Atapattu Kareya*, who furnish or execute fine work, and are principally employed in ornamenting or inlaying locks, guns, knives, handles, &c., with gold, silver, or brass; two of them perform service in the *Runawada Mandape*.

Four *Badallo*, or silversmiths, under the orders of a *Mohandiram*, who perform any gold, silver, brass, or copper works, and two of them perform service in the *Ranawada Mandape*.

One *Galwaduwa*, or stone cutter; twenty *mura Atchario*, or blacksmiths, under the orders of a *Hangidiya* and *Atu Hangidiya*, a certain number of them, varying according to the exigency of the service, attend constantly in Kandy, and, erecting workshops near the *Desave's* house, execute all kinds of common iron-works, for which the metal is furnished to them.

Eight blacksmiths, without regular service lands, under the orders of a

Hangidiya, who appear before the *Desave*, at the new year, with a knife and scissors each, and are called to service only upon emergencies.

Ten *Desave* blacksmiths, under a *Hangidiya*, who work for the *Desave* only. But these three classes of blacksmiths are sometimes placed under the same *Hangidiya* and *Atu Hangidiya*.

All the above artificers, except the blacksmiths last-mentioned, perform either particular works directed by the King, or works belonging to public buildings allotted to the *desavony*, or any works required by the *Desave*.

The Badahilabadde, or Potters' Department.

In *Galboda Korle* and *Paranakurua Korle* are eight potters, under the orders of a *Vidan* of their own caste appointed by the *Desave*.

In *Kindigoda Korle* and *Beligal Korle* are fourteen under another *Vidan*, nominated in the same manner ; but sometimes one *Vidan* is appointed over the potters of the three last *Korles*.

The potters of the first division attend on duty in Kandy during one month, at the *Maha Gabadawe*, and are then relieved by those of the second division, who serve one month more. During this period they are obliged to furnish as many earthen vessels as are required for the *Maha Gabadawe*, and to make tiles and bricks, and perform any other potters' work required for the King's service.

At their departure from duty, each division supplies one hundred earthen vessels to the *Desave's* house.

This two months' duty is performed in rotation with the potters of the upper districts, the Seven *Korles*, *Uwa*, and *Matele*, and this occurs once in ten months.

In the *desavony* they are bound to furnish tiles, bricks, and all kinds of pottery for the *Desave's* use, and earthen vessels to the different rest houses, when the King or Ambassadors come into the *desavony*.

When many tiles and bricks are ordered for the King's service, the people of *Syambalangomurwe* and *Godagame* are called to furnish firewood.

The *Hewa Wasam* people erect the necessary buildings.

Radabadde, or Washers' Department.

The washermen reside in all parts of the *desavony*, but are not a very numerous class.

They are under the orders of five head men, called *Vidane Heneya*,

appointed in the *Galboda Korle*, *Paranakurua Korle*, *Handapandana Korle*, *Kindigoda Korle*, and *Beligal Korle*, who have authority each over the people of their respective *Korles*.

But occasionally the washers of two *Korles* are united under the orders of one *Vidane Heneya*.

They attend in Kandy on duty for three months, at the beginning of the Singalese year, the other nine months' service being performed in rotation by the washermen of the seven *Korles* of the upper districts, and of *Martele*, three months each.

Their duty consists in hanging cloths in the *Maha Gabadawe*, and in the different apartments of the palace, in furnishing clean cloths for the temporary use of the principal attendants of the palace; torches and rags for lamps.

All come at the commencement of the *mura* to hang the cloths, after which, according to arrangements among themselves, one or two *Vidane Heneya*, and a competent number of washermen, remain to perform the duty during the period of three months.

In the *desavony* they are obliged to hang cloths constantly in the *Desave's* house, and in all rest houses, temporarily erected for the King's Ambassadors or the *Desave*, and in houses prepared for the reception of the *Atapattu Mohottale* and *Korales*.

The cloths are provided by themselves, from the emoluments to which they are entitled by custom from the inhabitants of the *desavony* whom they serve, consisting of cloths, paddy, or money; or, if these be insufficient, by other means.

Handabadde.

These are an inferior class of carpenters, and consist of only six families, under the orders of a *Vidan*.

Their duty consists in furnishing for the public festivals in Kandy a fixed number of couches, stools, and baskets of various kinds, woven with rattans, and besides as many baskets as may be occasionally demanded for the King's or *Desave's* service.

They deliver these articles to the *Desave*, who sends them to the proper department in Kandy.

The Kuruwe or Elephant Department.

The *Kuruwe* department is sometimes placed under the *Desave* of the

four *Korles*; but is sometimes conferred as a separate office, by the King, upon another chief of rank, who is then called *Kuruwe Lekam*, and by inferiors, *Kuruwe Desave*.

A *Vidan* is appointed by the *Desave* or *Lekam* over all the *Kuruwe* people, and under him are three *Kankans*, who convey his orders to the people, viz. one for *Paranakurua Korle*, one for *Galboda* and *Kindigoda Korle*, and one for *Beligal Korle* respectively.

Their duty consists in taking and taming wild elephants, and in keeping tame elephants committed to their charge.

In the *Kindigoda Korle* are three villages, called *Pannegam*, of low caste people, under seven head men called *Durayas*. The *Durayas* erect the *panti* or elephant stalls, and the people furnish fodder to the elephants.

There are ten *Galladdo*, and under them two *Patabendo*, and thirteen *Panikka* in their respective villages, whose general and ordinary duty consists in taking care of decoy elephants. These are suffered to roam and pasture in the jungle with their hind legs loosely tied together, and are brought in by their keepers once in three or four days, and their legs being untied, are bathed for two or three hours in a pool, and then turned into the jungle with their legs coupled as before.

When wild elephants are ordered to be caught, they collect the decoy elephants, and proceeding with them into the jungle, unite them with the herd; and with the aid of the *Panikkale* mentioned below, drive them into the *kraal* and secure them, and tie them in the stall.

There are besides, independent of the *Galladdo*, sixteen other *Panikkale*, who assist in driving the elephants into the *kraal* and securing them; and from the moment of tying them in the stall, undertake the sole charge of them, and tame them, which is usually accomplished in from six to twelve months. After taming, the tusked elephants are sometimes sent to Kandy, and sometimes remain in their custody; the rest are usually delivered to the *Galladdo*; and, occasionally, tusked elephants not caught in the four *Korles* are delivered to the charge of these *Panikkale* by the King's order.

When elephants are ordered to be caught, the *Kuruwe* people are usually placed under the orders of the *Desave*, because the assistance of the *desavony* people is required.

A *gala*, or enclosure, is constructed by the people of the *desavony*, with piles from about eighteen to twenty-four inches in diameter and nine or ten

feet above the ground, strengthened by four cross bars of cocoa-nut or other trees from ten to fifteen inches diameter.

It is usually of quadrangular form in plain ground, but sometimes circular or irregular, according to the nature of the spot selected, and contains a space of two or four acres. Within this area a rude platform is prepared upon a tree, or, if there be none convenient, upon a pillar planted for the purpose, in which four or five men are stationed with cords and nooses; two gateways are left in the *gala*, about ten feet wide and nearly opposite to each other, in order that the elephants, when driven, may suppose that there is a clear passage through.

A herd of wild elephants having been found, the *Galladdo* and their people collect their decoy elephants, of which the greater part should be females, and proceeding into the jungle unite them with the wild herd.

People of all classes within the *desavony* are called out and form a circle, or rather an irregular line, surround the elephants, and keep constant guard with guns, lances, long pointed poles called *ritili*, and swords, standing at intervals of one or two fathoms from each other in open or small jungle ground, and of ten or fifteen fathoms if there be the aid of rocks or steep places difficult for elephants to pass. They erect small huts of *talapát* leaves for shelter, and sometimes strengthen their position by a fence of trees felled on the spot, and deter the approach of the elephants by brandishing their weapons and by threats, and by fires kindled throughout the night.

The hunt usually lasts from one to seven or eight days, according to the distance of the wild elephants from the *gala*, and the facility of driving them, and at each day's advance the guards of the line close in. If there be a remarkably refractory elephant, they sometimes shoot him; but this necessity seldom occurs.

In the mean time the *Kuruwe* people remain constantly in the jungle, near the elephants, armed only with *henda* and *ritili*, and partly leading the wild herd by means of decoy elephants, and partly impelling them by voices, incitements, and the menace of weapons, thus drive them gradually to the *gala*, and as soon as they have entered, the gateways are suddenly closed by cross bars.

The men stationed in the tree now lay their nooses on the ground, and entice the elephants, both tame and wild, around it, by casting down fodder, particularly plantain trees, of which they are fondest; and as soon as the

foot of any chosen elephant has been set within a noose, it is pulled up and drawn tight to the leg, the other end being secured to the tree. The animal being thus confined is thrown upon his other three legs, and therefore with less difficulty, either from the tree or from the ground, under the protection of the tame elephants, is bound between two tame elephants, led out of the *gala*, and securely fastened in the stall.

Sometimes, in the construction of a *gala*, which is a laborious work, a proper place is chosen in the jungle, and a tree or pillar prepared with platform and nooses, the elephants are driven to it by the *Kuruwe* people, with the aid of the *desavony* people, and entrapped by the nooses in the manner above described. But this method is uncertain; because, if the first attempt fail, the wild elephants usually run off to a distance, and seldom one can be secured then.

Sometimes, for the King's diversion, the *Kuruwe* people of the four *Korles* drive into Kandy wild elephants mixed with the decoy elephants; and a pillar being planted in the centre of the great square, one or more of the best elephants are taken in the manner before described.

Sometimes, also, for the exhibition of an elephant fight, a large high-mettled elephant is driven into Kandy, and is met on the opposite side of the great square by another from *Matale* or *Kingale*. They are incited to contest by their respective keepers, and, if necessary, their anger and jealousy are stimulated by the introduction of female elephants between them; they advance into the centre of the square and join battle, seizing each other's trunks, striking with their trunks and feet, and beating with their heads and tusks. They are sometimes parted by their keepers, and the combat is renewed on one or more successive days, till one of them being fairly beaten and overpowered, runs away, and being pursued by the other along the streets, returns to his native forests. The conqueror is recalled by the voice of the female elephants, and his keepers receive their reward.

The village *Kahugula*, in the *Beligal Korle*, is the *Ninde* village of the *Kuruwe Lekam*.

It contains two *Hewanam*, who carry his *talapdts* in the *desavony*, and *coolies*, of whom one or two constantly serve in his kitchen.

It contains also a *Mullettu* field of five *pelah*. There is another *Mullettu* of two *pelah* in the village *Alawela*, and another of two *pelah* in *Bihawala*; all which are sown for *ande* on his account.

He is entitled to an annual contribution of a few *ridi*, called *pandura mila*, from the *Kuruwe* people. He receives twenty *ridi* annually for the appointment of *Vidan*, but not for the offices which are considered as hereditary.

When he proceeds upon service into the country, he is entitled to receive provisions once round from all *Kuruwe* people, except the inhabitants of the three *Pannagam*.

The Madige, or Carriage Bullock Department.

This department is sometimes placed under the *Desave* of the four *Korles*, but frequently assigned to a separate chief, nominated by the King, who in that case is styled by inferiors *Madige Desave*. A *Vidan*, appointed by the chief, performs the duties under him.

Their villages, their head men, and the bullocks which they are liable to furnish, are as follow :—

<i>Tuldomarwe</i>	1	<i>Mohandiram</i>	1	<i>Lekam</i> , furnishes 12 bullocks.
<i>Walagama</i>	1	<i>Kankan</i>	ditto.....	12 ditto.
<i>Weyloyagoda</i> }				
<i>Ragala</i> , and }	.....	1	<i>Mohandiram</i>	ditto..... 12 ditto.
<i>Talarwella</i> }				
<i>Undanwita</i>	1	ditto	ditto	4 ditto.

In *Gondolohe* there is also land subject to *Madige* service, which was abandoned some years ago, and has been since cultivated on account of the chief.

The *Madige* people of the above villages are of the fisherman's caste.

Each person possessing one *ammonam* of land is bound to furnish one bullock ; those of the headmen being exempted, and the *Gammarahes* performing other services.

Each bullock furnishes annually to the royal store, called *Maha Gaba-dawe*, one *goni*, or bag, containing forty store measures of salt, and one *karawala*, or salt fish ; and besides, to the chief, two *karawala*.

They render also to the King the profits upon the sale of *areka* nuts, realized in the following manner :—

The sum of 300 *ridi* is issued from the Treasury to the chief for the purchase of fifty *ammonams* of *areka* ; *i. e.*, at the rate of six *ridi* per *ammonam* of 30,000.

The chief divides it amongst his people, nearly in the proportion of six *ridi* to each proprietor, one *ammonam* of land, and the value of a few *ammonams* to the *Walanbadde Madige* people mentioned below.

They purchase the *areka* in small quantities from the inhabitants at such prices as they are able, which are necessarily low, because the sale of this article to other traders, and the exportation, are strictly prohibited.

They convey it by bullocks to *Ruanwelle*, and selling it at the best prices for the Columbo market, account for the whole profits to the Royal Treasury.

They also receive money from their chief, and deliver to him the profit upon an uncertain quantity of *areka*, varying from twenty to fifty *ammonams* per annum.

It is said that in two former years with the assistance of many other villages, 1,000 and 500 *ammonams* respectively were collected, and the profits paid into the Treasury, but with much opposition and difficulty, which, with the intervention of other services, occasioned a reduction to the usual quantity.

These *Madige* people are also obliged to perform other carriage service when required, as the conveyance of grain from the royal villages, receiving, however, one *laha* for each bullock-load; and they occasionally do the same for their chief.

The following people are Moor-men, and are called *Walanbadde Madige*, because they possess no service lands, but fields of small extent, which they have brought into cultivation from the estates of others: *Dumbulawawe*, containing one *Mohandiram* and six or eight people; *Hingula*, containing one *Mohandiram* and six or eight people.

Hence they are called upon to perform very little service, but, having bullocks, are not entirely exempt.

They receive money, as above stated, for a small quantity of *areka*, and account for the profits to the Treasury and to their chief.

They are also employed in the conveyance of grain, &c., if required, two or three times in the year: the people of *Dumbulawawe* usually for the King, and those of *Hingula* for the chief; but they are not liable to perform any of the duties above specified.

The chief of the *Madige* receives also the following emoluments, and *Ande mullettu* fields of three *ammonams*, at *Walagama*, are cultivated

on his account. There were formerly five *ammonams*, of which two *ammonams* have been assigned at different times to temples by the chiefs.

There was also a *Ninde mullettu* field of one *ammonam* at *Falgomurwe*, delivered some years ago by *Leake Desave* to another person, who has since paid an annual fee to the chief; and the three *Nilakaraya* who before cultivated it have since served him as coolies.

The *Mohandiram* and *Lekams* pay annually for their appointment five *ridi* each to the chief, and one or two *ridi* to the *Vidan*.

Besides the forty bullocks above mentioned, there are twelve bullocks appropriated to the chief from the same *Madige* villages, which supply him each with one *goni* of salt and three *karawala* per annum.

There are fourteen *Gammahes* in the above villages, who, with the other regular *Madige* people, contributed annually a sum of near fifty *ridi* to the chief, which is called *pandura mila*, and principally supplies the funds to pay to the Treasury his fixed annual *dekam*.

The three *Gammahes* of *Talgomawe*, having a larger extent of lands, give in rotation to the chief one *pingo* of fifteen cocoa-nuts per month.

The *Gammahes* furnish provisions gratuitously to the chief, or to his messengers when they come on duty to their respective villages. They attend him in travelling, and are sometimes employed to convey his messages, but perform no *Madige* service with bullocks.

Villages.

The several classes of *desavony* people, and duties to which they are liable, having been described, it remains to notice several villages, which are the property of the crown, or of temples, or otherwise circumstanced, which render dues and services distinct from the foregoing. Those which are properly exempt from the *Desave's* authority, were, on occasions of urgent public service, sometimes placed under his orders.

The following villages belonged to the public *Wahala*, or establishment of the queens, but were occasionally granted to the others of the royal family.

They contain *mullettu* lands of the extent hereafter specified, which are cultivated on account of the royal family, or other grantee; and the inhabitants, amongst whom are many low-caste people, of all except the three last, are bound to perform appropriate personal services for them.

	A.	P.	
<i>Habalakkawe</i> contains... <i>Mullettu</i>	4	0	
<i>Pattegammanna</i> ditto	2	2	
<i>Galigomawe</i> ditto	1	2	
<i>Hakahinne</i> ditto	0	2	
<i>Korawelle</i> <i>Ande</i>	4	0	
	<i>Ninde</i>	0	2
<i>Hapuwelle Gampa</i> <i>Mullettu</i>	3	3	and three royal gardens.
<i>Undurawela</i>	3	3	and two ditto unproductive.
<i>Dewe</i>	3	0	and one ditto.
<i>Araneyke</i> {	No <i>Mullettu</i> and no royal gardens. The inhabitants furnish twelve (<i>neyle</i>) measures of cocoa-nut oil, monthly, to the <i>Pulle Wahale</i> store, as the duty for their lands.		
<i>Panagomawe</i> {			
<i>Allapittiya</i> {	The inhabitants furnish annually to the same store 4,400 pieces of white <i>jaggery</i> , and five <i>pingos</i> of <i>jaggery</i> syrups.		
<i>Panagomawe</i> {			

The following two villages are also royal, under the orders of *Uda Gabada Nilame*. They contain *mullettu* lands of the extent stated below, which the inhabitants cultivate entirely on account of the crown. They beat the paddy into rice, and carry it to Kandy, and deliver a certain quantity into the royal store, called *Uda Gabadawe*, once in fifteen days. They are under the orders of a *Mohattale* and inferior head men, and pay *pingo* duties to the *Maha Gabadawe*, and contributions called *pandura mila* to their own chief.

	A.	P.
<i>Dedigama</i> contain <i>Mullettu</i>	9	2
<i>Menikkadawere</i> ditto	5	2

The following villages are called *Desave Gabada Gan*, or royal villages, under the orders of the *Desave*. They contain *mullettu* fields of the extent specified beneath, which are subject to the payment of paddy allowances to the servants of the royal store, *Uda Gabadawe*, and the remainder of their produce, if any, is the perquisite of the *Desaves*.

	A.	P.	Ammonams.	
<i>Pamunawe</i> contains <i>Mullettu</i>	2	2	gives 11	} annually to servants of the store.
<i>Padidore Marwana</i> ditto	6	0	..... 27
<i>Kawudaulle</i> ditto	2	1	..... 9
<i>Dorawaka</i> ditto	4	2	..... 40½
<i>Ballapana</i> ditto	6	2	..... 45

The inhabitants perform the services above described under the head of *Hetawedakarayo*.

Lands at *Baliowalle* of seven *ammonams* in extent; at *Walayama*, of three and a half *ammonams*; and at *Hingule*, of eight *ammonams*, were partially brought into cultivation in the last year of the King's government, but for want of cultivation the two former have been abandoned, and the latter only partially sown.

Anderamade, having no *mullettu*, or royal gardens, furnished five measures of cocoa-nut oil, monthly, to the *Maha Gabadawe*.

Rahala and *Waragoda* are attached to the royal kitchen in Kandy. The inhabitants are obliged to bring timbers, build and keep it in repair, and perform ordinary services for their chief.

Talgama and *Badawala* contain each one *Ande mullettu* of about 1a. 1p., from which four and a half *ammonams* of paddy are annually given to a servant of the royal store. Two of their inhabitants are constantly on duty at the *Desave's* house, and furnish charcoal to the blacksmiths.

Mahena contains an *Ande mullettu* of two *ammonams*, of which one *ammonam* is seldom cultivated, and gives an allowance of four and a half *ammonams* per annum.

Ambepusse, a *Ninde mullettu*, of one *ammonam* and one *pelah*, which gives seven and a half *ammonams*.

The inhabitants of these two villages furnish monthly from ten to twelve lumps of rough iron from each, for the *Desave's* use, and perform other occasional services required of them.

Gangoda, *Mallegadde*, *Jallawela*, *Dimbulgomurwe*, *Meleyagave*, *Guwepitiye*, *Ballewale*, *Wellangammalle*, *Endurapota*, are called *Saramaru* villages, being sometimes granted by the King, otherwise, temporarily disposed of by the *Desave* as *Ninde* villages.

They contain each small *mullettu* fields, which are cultivated on account of the grantee, and he is entitled to the benefit of the personal services of the inhabitants, according to custom.

The following villages are more especially appropriated to the personal services and accommodation of the *Desave*; but the four first yield also some revenue to the crown:—

Debatgome contains a *mullettu* of 5 a. 1 p., from which twenty-seven *ammonams* of paddy are annually paid to the servants of the royal store. Two men are constantly on duty in rotation at the *Desave's* house. They

furnish water and firewood for his kitchen and bathing house, and carry his kitchen furniture on journeys.

Gabbala and *Parrapi* have no *mullettu*. They furnish monthly 500 lumps of white *jaggery* to the *Uda Gabadawe*, and the like to the *Desave*, and sometimes extra supplies, if he requires it, on other occasions. Two inhabitants, one from each village, are on constant duty at the *Desave's* house, and serve in his kitchen.

Gantune has no *mullettu*. It furnishes annually to the *Maha Gabadawe* 390 lumps of *jaggery*; to the *Desave*, such occasional quantities as he requires, and its inhabitants carry the *Desave's* baggage on journeys.

Etnawala contains no *mullettu*. It is the peculiar employment of its inhabitants to carry the *Desave's* palanquin. Two or three are constantly on duty at his house, and carry his *talapât* and torches, &c., when he goes abroad; when the *Desave* travels a greater number are summoned from the village to carry his palanquin.

Dunugama and *Godigonuwe* formerly furnished an indefinite quantity of saltpetre to the *Desave*, to make gunpowder for firing salutes and for war, and the inhabitants carry the *Desave's* baggage on journeys. The former duty has been abandoned during the last few years, and they have performed in lieu of it any ordinary work required of them.

Aramyke contains a *mullettu* of three *pelah*, which is cultivated by the inhabitants on account of the *Desave*. Some of them furnish white *jaggery* and syrup for his use; others carry his box of dressed provisions on a journey.

Ampe contains an *ande mullettu* of two *pelahs*, cultivated on account of the *Desave*; its inhabitants erect a kitchen near the *Desave's* rest house in the *desavony*, and perform other occasional services.

The *Desave* can in general command the occasional labour of the inhabitants of these villages for garden, field, or common domestic work.

The villages specified beneath are temple villages, not including, of course, many temple lands of inconsiderable extent which are situated in different villages throughout the *desavony*. Many of them contain *mullettu* fields, of which the produce is applied to offerings, and to the maintenance of the priest and officiating servants. The service of the inhabitants for the lands which they possess consist in the cultivation of the *mullettu* field, the performance of fixed duties at the temples, or keeping them in repair.

The following belong to different *Wihara*, and are called the *Wihara Gan* :—

Dewanagala Ruwandemaya, Hengule Allutunwere, Kapagoda, Silawa Mediliya, Deppit-ye, Deyagama, Ambulugata, Wakerigala, Wattarama.

The following belong to the temple :—*Daladu Maligawa*, in Kandy, *Kempitikande, Holombawa Nelundeniya.*

The following belong to the *Maha Dewale*, in Kandy :—*Alutunwere, Jhalakotte, Arandere, Tambugala, Algama Andaoluwe, Ambala Kande.*

To *Hangurankete, Maha Dewale Nikapitiye, Udamagama Naranbadde.*

To *Alutunwere, Maha Dewale, Udarwidiya, Pallewediye Ayagama, Gällelle, Alapitiya, Karahanpitigoda, Welawalare Rukulagama, Medagoda, Rikerugoda, Dewanagela Batawala.*

To *Kalarawawe Dewale*, in Kandy, *Galalam Mottappuliya.*

To *Pattini Dewale*, in Kandy, *Warakapola.*

The Administration of Justice.

The supreme judicial power resides in the King, and is exercised either in original jurisdiction or on appeal.

Cases originally entertained and decided by the King are, first, those which arise between any principal chiefs, or principal officers or servants of his court or household, or cases in which a principal person belonging to any of those classes is defendant, especially those regarding *dukegenawe* lands (domestic services): but suits concerning lands held by any such person for other than *dukgenawe* service, may be heard and decided by the chief within whose jurisdiction they are situated; and disputes arising amongst inferior persons belonging to the King's court or household, as the *Ulpenge, Multenge*, and *Kunan Maduwe* people, are decided by their respective chiefs, or by the *Adikar*, without reference to the King; secondly, suits arising amongst priests for principal temples or benefices; and, thirdly, high crimes, of which no inferior authority can take cognizance, *viz.*

Treason, rebellion, conspiracy, and other crimes affecting the King's person or family.

Every species of homicide, maiming, or depriving of any organ or member.

Robbery of the royal treasury or property,

Important forgeries and false coining, or uttering false coin.

Sacrilege, as destroying a sacred image, cutting down a sacred tree, or striking a priest.

Elephant slaughter, in the upper districts, or in the provinces contiguous to Kandy.

Other offences of an aggravated nature, which, though competent to the authority of the chiefs, may be considered of sufficient importance to report to the King.

Appeal to the King lies open to every individual from the decision of any chief in civil cases, without limitation of lapse of time or value.

The appeal is introduced to the King's notice, either by the representation of a chief or courtier, or by the individual who thinks himself aggrieved prostrating in the road when the King is abroad, or prostrating at any other time towards the palace: an occurrence which any person who observed it is obliged to communicate immediately to the King through some officers of the palace; ascending a tree near the palace and proclaiming aloud his grievance, or taking refuge, as was sometimes done in any instance of supposed injustice, in the *Maha Gabadawe*, or the temple *Dalada Maligawa*, or other royal or religious sanctuary.

When a case is thus brought under his cognizance, it is either heard in the King's presence or referred for hearing and report to the Great Court of Kandy, called *Maha Naduwe*, composed of the principal Kandyan chiefs.

If the former, the King is seated at the window of an apartment in the palace. The Kandyan chiefs, kneeling in the hall or varanda below, question, according to the King's directions, the parties and witnesses; and the King, after taking their opinion, passes his decision.

If the latter, the case is heard in the Great Court of the chiefs, who report the circumstances with their opinion to the King; are sometimes referred for further inquiry and report till he is satisfied, and then receive his decision; or sometimes are ordered to decide by oath.

The Great Court, or Maha Naduwe.

The Great Court, called *Maha Naduwe*, properly consists of the *Adikars*, *Desaves*, *Lekams*, and *Mohandirams*; but of late years all the chiefs have been called to assist at it, and especially any that are distinguished for their ability and judgment.

The court was held at different periods, as occasion suited; sometimes in

different buildings without the palace, or sometimes in the varanda of the hall of audience.

There was formerly, it is said, a court-house near *Paltene Dewale*, which was partly rebuilt in the time of the last deceased King, but never completed.

The chiefs take their seats according to rank, from right to left; and the *Adikars*,* or any other chiefs of ability and experience, principally conduct the enquiry.

The proceedings take place in the natural or most obvious course. First hearing the statement of the plaintiff or prosecutor, next the answer of the defendant or prisoner, next the evidences of the plaintiff or prosecutor, and lastly those of the defendant or prisoner.

All the witnesses on both sides, as far as practicable, are collected and examined on the same day. If a witness be disabled by sickness, without a prospect of early recovery, messengers are sent, and bring his evidence in writing, confirmed, if possible, by oath at a neighbouring *dewale*.

The witnesses are never sworn in court, and on clear trifling cases no oath is administered. In others they are sent to the neighbouring *dewale*, and sworn to the truth of their deposition in the presence of two or three head men as commissioners, who return and report to the Court.

The examination is entirely *viva voce*, and no part of the proceedings are taken in writing, except a list of moveable property, which may be claimed as due or stolen, and excepting that either party sometimes presents a statement of his case, written on an *ola*, called *witti walleruwe*.

In land cases, which are by far the most numerous, it is the general practice to commence with the original proprietor, three or four generations in ascent, and thence to trace downwards, by inheritance or transfer, the title of the suitors.

The cases which come under the cognizance of the Great Court are either civil or criminal, and of two kinds :—

First, Those which are referred for hearing by the King, and are invariably reported and decided by this authority, in the manner above-mentioned.

Secondly, Those which are originally instituted before it, or, as is usual, introduced by the chief under whose jurisdiction the complaining party is.

* Sans. *Ad'hikāra*, the bearing of royal insignia.

These, after regular investigation in the manner above stated, are decided by the majority of the witnesses ; or, if doubtful, are ordered to be decided by oath.

Differences of opinion amongst the chiefs were seldom persisted in after full discussion. But if either party be obstinate against the determination of the Court, the case is sometimes submitted to the King, especially if it concerns property of value, or persons of consequence.

In all suits for land decided by the King, after reference to the Great Court itself, or without such reference, decrees written on *ola*, called *sitta*, are signed and given by the senior *Adikar* present, or sometimes by the second *Adikar* for lands situated within his general local jurisdiction. The *sitta* contains the names of the parties, the land in dispute, the decision, and the date. If the decision be passed by the King, it records his authority ; if not, the authority of the Court.

The *sitta* is given only to the gaining party, and no copy or record of the decision is preserved by the Court.

The Great Court, in taking cognizance of civil and criminal cases, except those referred by the King, as well as in the infliction of punishment, cannot exceed the powers which are individually vested in the *Adikars*, and which are mentioned below.

Jurisdiction of the Adikars.

The *Adikars* are severally invested with the following judicial powers :—

They have exclusive jurisdiction, subject only to the King, in civil and criminal cases, over all persons subject to their peculiar authority as above described.

They have a concurrent jurisdiction with the proper chiefs, over all persons in the provinces above described as subject respectively to their general authority : provided that they entertain no such cases except in communication with the proper chief, and that they cannot decide without his concurrence.

If either party protests against the decision, the *Adikars* submit the case to the Great Court, or to the King, and are especially obliged to do so if he be of considerable rank, or attached to the King's Court or to his immediate household.

They can hear and decide criminal cases between individuals without limitation of value ; but cannot take cognizance of those which affect the

royal lands, or *Dukgenawe* lands, unless on the complaint of a common person the *Dukgenawe* be satisfied, and the decision be in his favour.

Nor can they take cognizance (unless both parties voluntarily come to them as arbitrators) of cases which arise between principal chiefs, or principal officers of the King's household, or in which any such person is defendant, but only in concurrence with the proper chief of those which concern inferior people belonging to the same.

In all cases arising in the Upper Districts, the *Adikars* alone can give *sitta*, or written decrees for land, and *dewe sitta*, or written oaths for swearing by oil.

With the same limitation in respect of persons, and in concurrence with the proper chiefs, they can hear and decide all criminal cases, &c.

They can hear and decide all criminal cases of burglary, robbery, theft, assault, and other minor offences, but usually report to the King any remarkably atrocious cases which occur.

They cannot take cognizance of the high crimes above enumerated as belonging only to the King's jurisdiction, but submit all such cases to the King.

They have the exclusive privilege of awarding punishment with the cane, which is borne by their officers, the *Katubulle* people.

They have power to inflict corporal punishment, imprisonment, and fine, and without fixed limit in degree; but the mode of punishment will vary according to the rank of the offender, and their power must be exercised subject to the following restrictions:—

They cannot inflict corporal punishment on the following persons, *viz.*

Principal chiefs, *Dukgenaweles*, or persons belonging to noble families.

The *Sutambies* of the *Ulpeng* or *Kunam Maduwe*, the *Kunam Maduwe* people, *Talapattwaddon*, *Pandakkarego*, the royal washerman, the *Lekams*, *Kankans*, and *Gebanerals* of the *Gabada*, *Aramudala*, and *Awudage*.

The *Mulachariya*, and head men of the *Pattala*, or artificers' department, attached to the King; the *Maduwe Mohandirams*.

The *Betge Wedrales*, the *Maha Lekam* people.

The *Kariyakarana Rales*, and *Wattern Rales* of the *Maligwa*, and the *Kapaurales* of the *Dewale*.

Of the foregoing they can imprison and fine the *Kunam Maduwe* people, the royal washerman, the *Maha Lekam* people, and the officers of the temples, but no others without the King's authority.

They exercise these powers (except over persons under their peculiar

jurisdiction) in communication with the proper chiefs, and never without their concurrence.

Prisoners confined by the *Adikar's* orders cannot be released by their proper chief without leave of the *Adikar*; but fines which may be levied are the perquisite of the proper chief, and not of the *Adikar*.

The proper chiefs, with regard to the infliction of punishments, are subject to the same restrictions as the *Adikars*.

In every case appeal lies to the King from the decision of the *Adikars*.

Jurisdiction of the Desaves.

The *Desaves* have jurisdiction over all persons and lands within their respective *desavonies*, except those attached to the King's court or household, or to the department of another chief appointed by the King; and they rarely exercise it over these unless upon the application of the proper chief, and sometimes by their own right, when upon extraordinary emergencies any such villages or departments are especially placed under their authority. Subject to these exceptions, they can hear and decide all civil cases without limitation of value.

On the complaint of a *desavony* person, they can entertain his claim for *Dukgenawe* land, if the possessor be satisfied, and they can grant a decree in his favour; but if the *Desave's* opinion be against the defendant the matter must be referred to the King.

They can also hear and decide cases regarding lands subject to *desavony* service, between any persons whatsoever.

They have power to grant *sitta* or written decrees for land, with their signature and *dewe sitta*, or written oaths by oil, within their respective *desavonies* only. Subject to the same limitations, they can hear and decide all criminal cases, except the high crimes before stated to belong exclusively to the King's jurisdiction; but they usually report to the King other remarkably atrocious offences, though subject to their own decision.

They can award corporal punishment (except with the cane), imprisonment, and fine, without any fixed limit in degree, upon persons subject to their jurisdiction; but are bound to pay regard to the rank and condition of the parties, according to the following rules established by usage:—

Corporal punishment is not inflicted on persons of noble families, nor on the *Atapattu*, *Desavony*, or *Kodituwakku Lekam*, *Korales* of high family, the *Wanniyar*, the *Waluwuwe*, *Mohottales*, and *Atapattu Aratchies*

of the four *Korles*, nor in general upon persons who have held those offices.

Korales of low family, *Aratchies*, *Vidams*, and *Vellales*, may be punished with the open hand.

Vellales of low condition, for flagrant offences, and persons of low caste, are punished with rods called *ipal*. The persons above-mentioned as exempted from corporal punishment are not imprisoned in the *Maha Hirage* (common gaol); the *Desave* usually fixes a fine for offences, and detains them in the *Atapattu Maduwe* till it is paid.

If the offences be considered to merit greater punishment, by representation to the King they are imprisoned in the *Katabulle* village, or in the country.

Other persons are imprisoned, according to the *Desave's* pleasure, in the *Atapattu*, or *Kodituwaka Maduwe*; the more atrocious offenders in the latter, and sometimes in the *Maha Hirage* in Kandy, or in a *Kadawata* of his *desavony*, for such term as he deems adequate to the offence, or till the payment of such fine as may be demanded.

The *Desave* most frequently and properly hears the cases himself, seated in the court of his house, and surrounded by the head men of his *desavony* standing in his presence.

He sometimes commits the enquiry to two or three principal *Mohottales* or *Korales*, who conduct it in public outside the *Desave's* dwelling, sitting in the *Atapattu Maduwe*, and make report to him, as the Court of Kandyan Chiefs to the King; but this delegation is stated to be an impropriety introduced of late years.

In doubtful cases, he frequently takes the opinion of the principal head men of his *desavony*.

The decision is communicated to the parties, sometimes by the head men, and sometimes by the *Desave*; and finally the *sitta*, or decree for lands, is granted to the successful party on payment of the fee demanded, which, according to its value, usually varies between five and fifty *ridi*.

The proceedings are conducted in the manner already described to take place before the great court of Kandy.

Jurisdiction of Lekams Rate Mahatmeya and other Chiefs.

The *Lekams Rate Mehatmeya*, the principals of temples, and the chiefs of departments attached to the King's court and household, have a civil and

criminal jurisdiction over all persons subject to their orders, and over no others.

They can hear and decide all civil cases arising amongst them, or in which any such person is defendant, without limitation of value.

They can dispossess of land, and give a written *walloor* addressed to the head men, reciting the decision, and ordering possession to be delivered to another, but can on no account grant *sitta* or *wattera* of decision with their signature, or *dewe sitta* in the upper districts, nor administer any oath in Kandy; but the principals of the temples in Kandy can give *sitta* of decision and *dewe sitta* in cases arising in villages belonging to their respective temples which are situated in the *desavonies*.

They can hear and decide all criminal cases, with the exception of the high crimes above enumerated; but they usually represent to the *Adikars* other offences of some atrocity, and those of less importance than the *Desaves* would decide, because, occurring in the vicinity of Kandy, the transaction cannot escape publicity; and because, being of inferior rank and weight, and standing under the eye and control of superior authority, these chiefs are diffident of their ability, and fearful of incurring displeasure or giving offence by an erroneous judgment.

They can award corporal punishment (except with the cane), imprisonment, and fine, without fixed limit, against persons subject to their jurisdiction, paying regard to their respective rank and conditions.

Corporal punishment is not inflicted by them on the principal head men, *Korales*, and *Aratchies*, except on occasions of urgent public service, or for great offences, with open hand, nor on the principal officers of the temples.

Ordinary *Vellales* are punished by them with the open hand, and persons of low caste with rods, excepting properly the *Maha Lekam's* people.

But when the *Lekam* people, and all other inhabitants of a district, are temporarily placed under the *Rate Mahatmeya*, for the performance of some urgent public service within it, they have of late years punished *Maha Lekam* people with the open hand, and the other common *Vellales* with rods.

They can imprison any of the headmen abovementioned, or any other persons, in the *Maha Hirage*, or in their own houses, and impose any moderate fine, upon payment of which they are usually released.

It is said that former kings prohibited any fine exceeding seven *ridi* and a half to be levied in the upper districts. This order has long since fallen into disuse.

The fine imposed by any of these chiefs usually does not exceed ten or twenty *ridi* ; and they are cautious of awarding excessive punishments of any kind for the reason above stated.

In any case of doubt and difficulty, or when either party dissatisfied threatens to appeal, the chief usually brings it under the cognizance of the *Adikar* or the great court.

Jurisdiction of the Mohottales, Korales, Wannyar, and other head men of the Desavonies.

The *Atapattu Desavony*, and *Kodituwakka*, *Mohottales*, or *Lekums*, the *Korales* and *Aratchies* of the *Desavonies* have a limited jurisdiction in civil and criminal matters over all persons subject to their authority respectively, but they exercise it chiefly when the *Desave* is absent in Kandy.

Their power extends in civil matters to disputes regarding the limits of gardens or fields a few *korales* extent, of *chena* ground, the possession of a few fruit trees, debts of a few *ridi*, or a small quantity of grain, &c.

They can give written *wattera* of decision without signature, and deliver possession of lands, and sequester lands and crops.

In criminal cases their power extends to robberies of cattle, *paddy*, fruits, betel, &c. Assaults and quarrels, toddy and arrack drinking, neglect of duty, and failure in paying revenue.

All offences of greater moment they ought properly to refer to the *Desave*, but they sometimes settle cases of housebreaking or other serious robberies, if the prosecutor complain to them, and be satisfied with recovering his lost property and the usual damages.

They can cause slight corporal punishment to be inflicted on common persons subject to their orders standing with the open hand ; on persons of low caste with rods.

Robbers of every description, whose guilt is undoubted, they can imprison in their houses, or in a *kadawata*, in the stocks, or otherwise, till they restore the stolen property with damages.

Other offenders they confine for a few days, or make them prisoners at large by taking the handkerchief from their heads.

It is held that the three principal *Mohottales* cannot properly impose a fine exceeding ten *ridi*, the *Korales* and *Aratchies* not exceeding five *ridi*.

They are accustomed to recover fines by placing the culprit in *Welakme*, that is, a prisoner under inhibition to move from the spot till he has

satisfied the demand ; upon this his relation or friend undertakes for him to discharge it, or a pledge is delivered.

But the *Mohottales* of the Seven *Korles*, *Woa*, and *Saffregam*, by reason of the distance of many parts from the capital and consequent difficulty of control, have assumed far greater power, which, though exercised without disguise, must be considered as illegal.

They have been in the habit of deciding land cases of greater value, granting *sitta* of decision. The *Atapattu* and *Desavony Mohottales* of the Seven *Korles* have even granted *sitta* with their signature, and the *Atapattu* and *Kodetavakka Mohottales* of *Saffregam* without signature ; and in both provinces they have issued *dewe sitta*, or written oaths for swearing by oil.

When sent on service into the country by the *Desave* to collect people or revenues, they have taken the opportunity of exercising almost arbitrary powers—those of the Seven *Korles* in particular, levying fines to the amount of fifty or a hundred *ridi* ; but on their return, partly as a due, because they pretend to act in his name, and partly in order to cover their rapacious acts, they deliver a portion of their fines to the *Desave*.

The *Wannyar* of *Nuwerekalawiya* from ancient times are considered to have had the power of granting *sitta* of decision, and *dewe sitta*, and of awarding penalties not inferior to those inflicted by the principal *Mohottales* of the Seven *Korles*. In short, they are held to possess within their respective *Pattus*, power nearly equal to that of a *Desave*, but are restrained in the exercise of it when the *Desave* is in their province.

These head men act universally as police officers throughout the country, and it is their duty to arrest and send before the proper authority offenders of every description.

Jurisdiction of Liyenerales, Undiyerales, Korales, and Aratchies of the Upper District.

The headmen of these districts, which are adjacent to Kandy, and admit of easy reference to superior chiefs, have very limited powers.

They settle trifling civil cases rather as arbitrators than judges, when the parties submit to their cognizance.

They cannot dispossess of land, but on complaint can sequester lands and crops ; and for default of revenues, or failure of attendance when summoned, they can sequester lands, crops, or dwellings.

In like manner, when submitted to them, they can hear complaints of petty robberies and quarrels, toddy and arrack drinking, &c.

They can punish persons of low degree by ten or fifteen blows with the open hand, inflicted standing.

Robbers whose guilt is clear and confessed, they imprison till satisfaction is made; but if the accused deny or protest, they are bound to send both parties before the superior chief.

It is held that in other cases they cannot imprison above one or two days, either by taking off the handkerchief or by close confinement, without sending the party, or at least reporting him to their chief.

And that they cannot legally, by their own authority, levy a fine exceeding three *ridi*. But in a case which clearly merits it, they can levy a fine of five, or seven *ridi* and a half, in the name of their chief, reporting the case and delivering the fine to him, and one *ridi* more for their own perquisite.

They recover fines by placing in *Welakma*, in the manner before described, and act as police officers in their respective districts and departments.

Jurisdiction of Vidans.

The *Vidans* who are appointed over particular villages have limited powers, of the same nature, in civil and criminal matters of trifling importance.

They occasionally punish people of low castes by a few blows with the open hand, inflicted standing.

In general they cannot properly imprison without reporting to their chief, nor levy a fine exceeding two *ridi* and a half, of which the half *ridi* belongs to the *Duraya*.

If they levy a larger sum, they must report and account for it to their chief.

But the *Vidans* of the royal villages, especially of those situated in the *desavonies*, imprison four or five days at the royal granary, and levy many fines of small amount, especially for neglect in the cultivation of royal land, and trespasses of cattle, &c.

They recover fines by placing in *Welakma*, and act as police officers within their local jurisdiction.

Gansabe or Village Court.*

This court is frequently held both in the *desavonies* and the upper districts, and consists of an assembly of the principal and experienced men of a

* Sans. *Grāma* a village and *sabhā* an assembly.

village, who meet at an *Ambalam*, or a shady tree, or other central place, upon the occurrence of any civil or criminal matter, as disputes regarding limits, debts, thefts, quarrels, &c. ; and after enquiring into the case, if possible settle it amicably, declaring the party which is in default, adjudge restitution or compensation, and dismissing with reproof and admonition, their endeavours being directed to compromise and not to punishment.

It frequently happens that a head man in office is one of the assembly, in which case a fine is sometimes levied for offences, and in some *desavonies* is shared with the other assessors.

The following General Rules and Customs observed in Judicial Matters may be here mentioned :

No chief can interfere with decrees passed or grants made by the King's authority, or with decrees passed by the Great Court, except for the purpose of confirming them.

If the defendant in a suit repeatedly fail to appear, and evade a hearing, provisional decrees are sometimes granted in favour of the plaintiff; this process usually compels appearance, and the suit is thereupon duly investigated.

Any chief in office can rehear cases decided by his predecessors, and reverse their written decision.

In the Seven *Korles* two or three adverse decrees will sometimes be found in the possession of both litigant parties for the same land, but such abuses are not frequent in other provinces.

In criminal as well as civil cases, it is customary to admit the evidence of the complainant, his near relations, his slaves, or servants.

It is a general rule that fees or presents given to a chief for the purpose of gaining a suit, or promoting any other object, must be returned on demand if the suit be lost, or if the object be not accomplished.

If, after full enquiry and examination of all the evidence on both sides, a case should still be doubtful, it is customary to decide it by oath, of which the several species will be shortly explained.

General Observations.

This system of judicial administration evidently marks a barbarous state of society ; but if it were purely administered, is apparently as well calculated to afford the means of justice as any which could exist under a despotic government, in which the executive and judicial powers are united ; every individual having the liberty of seeking redress, first by application to

the principal of the village, next to the head men or chiefs of the province, next to his superior chief, to the *Adikar*, to the Great Court, and lastly to the King. Appeal lying from all the subordinate to any of the intermediate, or to the supreme authority, in case either party be dissatisfied with their decision.

But several circumstances remain to be mentioned which tended to prevent the impartial administration of justice, and corruption has unfortunately pervaded almost all its branches.

1st. Justice in very few cases is administered gratuitously.

It is said that in former times, and according to the lawful custom of the kingdom, no other fee was payable than a sum of five or ten *ridi* by the gainer of the suit, upon receiving the *sitta* or written decree in his favour, and that verbal orders have on different occasions been given by the Kings forbidding the chiefs to receive bribes (though it is denied by some to the extent stated) and do injustice.

But as the presents are conveyed in private, such occasional orders were unavailing to prevent it, and it is certain that the practice prevailed to such an extent as to corrupt the system.

Every person appearing before his chief, whether on account of a complaint or for any other cause, is expected to bring with him forty *betel* leaves, and, unless he be exceedingly poor, a *pingo* of dressed rice or cakes, *jaggery*, fruits or vegetables, the value of which is trifling, and being established universally by custom, it is a token of respect and not a bribe.

But in order that the case may be brought to a speedy hearing, the complainant is frequently under the necessity of presenting (or at least finds his advantage in doing so) a fee called *bulatsuralla*, of a few *ridi* value, to his head man, to the *Walaurwa Moholla* or *Vidan*; and in the course of the suit frequently conveys to the Chief, who is his judge, other presents, according to his ability or to the value of his claim, and his adversary often adopts the same course to secure his interest.

The advantage of the rich over the poor suitor and other consequences of this practice, are too obvious to pursue farther.

2d. All fines levied by the chiefs belong, not to the crown, but are the entire perquisite of him who levies them.

3d. The Kandyan chiefs had no stipends, and the short period for which all, except the *Adikars*, are usually allowed to remain in the same office, though guilty of no offence, was a strong additional inducement to take

advantage of the moment, and enrich themselves by every means which lay within their reach.

4th. The chiefs being sometimes required by the King to make extraordinary contributions, and to pay fines, necessarily exacted the means of satisfying them from the people.

5th. The chief officers being principally chosen from the noble families, it frequently happened that they were persons of inactivity; and being inexperienced in the affairs of the province or department committed to their charge, were frequently guided in judicial as well as other concerns by the provincial head men, or by those of their household, who are equally, if not more interested in the profits capable of being extracted from their temporary situations; hence such chiefs often give their decision after an imperfect investigation, or upon a mercenary report of the case.

6th. Nor did the liberty of appeal afford an effectual remedy against wrongs.

7th. Because many persons were fearful of hazarding the displeasure of a powerful chief, who might find many future opportunities of injuring them.

8th. Because the King was not frequently in the habit of personally investigating suits between common individuals; and if referred to the Great Court for enquiry, the influence of the chief who had passed the first decision, or of his relation or friend, or a new *bulatsuralla* might still give a preponderance contrary to equity.

9th. As fees had their influence in civil matters, they were also frequently given in criminal. The culprit or his relations often prevailed, by means of presents to the chiefs, in obtaining a remission or mitigation of punishment for great offences, whether brought under the King's cognizance or otherwise; and there are instances in which chiefs, notwithstanding the established order, have concealed homicides, and discharged the accused, after a short imprisonment, without trial.

But although, under the system which prevailed, the way was open to the perversion of justice, it would be hard to deny that substantial justice was frequently obtained, as in the following instances:

1st. When cases were heard in the presence of the Kings, who, except in terms of minority or inexperience, when they were under the influence of powerful chiefs, were seldom known to judge unjustly between individuals.

2d. When cases were investigated in the Great Court, where the publicity

of the enquiry and the number of the chiefs who were judges were in general securities against a palpable injustice, though fees were sometimes presented to the chiefs of principal weight in that court, and sometimes probably influenced its decisions, especially when its assessors were few.

3d. When trifling cases are heard and settled by the village court, in which the principal inhabitants of the village in fact constituted a jury.

4th. When litigations arose amongst the most indigent part of the community, who having nothing to allure the avarice of their judge, will usually obtain justice from a single chief, though it be more difficult to obtain a hearing; and there have been some few Kandyan chiefs reputed no less for their ability in the investigation of suits than their integrity in the decision of them.

Lastly, the abuses abovementioned are much more frequent in the *desavonies* which are distant from the capital than in the districts surrounding it, because the inhabitants of the latter are more immediately under the royal eye and superintendence, as from being constantly called to Kandy, on public services, and at public festivals, they had frequent communication and acquaintance with the principal chiefs and with each other, and hence acquired a knowledge of their established customs and a sense of injuries. They had more frequent and ready opportunities of laying their grievances before the King or the *Adikars*, or some other than their own chief; and the chiefs themselves were more fearful of doing injustice, either by partial judgment, or by severe punishment, or by exorbitant and unusual fines.

But it will be observed, upon a review of the whole system, that there existed under the Kandyan government scarcely any other safeguards against a corrupt administration of justice than were to be found in the personal integrity of the chiefs, who had every temptation to prevent it.

Institutions and Customs.

The Kandyans have no written laws, and no record whatsoever of judicial proceedings was preserved in civil or criminal cases.

In cases of land only written decrees called *sitta*; and if decided by oaths the two *dewe sittas* were delivered to the party to whom the land was adjudged, and continued as title deeds in his family.

There was therefore nothing to restrain the arbitrary will of the King, and nothing to guide the opinions of the sovereign judge and the chiefs but

tradition and living testimonies, and for want of written authorities, the following short outline of those principal institutions and customs, which seem to be most generally acknowledged and sanctioned by precedents and the existing practice, I fear will be imperfect and liable to many errors.

But with respect to high crimes, of which the instances within memory are comparatively not very numerous, as the punishments varied according to the temper of the reigning prince, and as it is difficult to distinguish the decision of law from the mitigated sentence, which both depend on the same supreme authority, it may almost be asserted that no fixed rule existed.

Crimes and Punishments.

First—Treason, conspiracy and rebellion.

These crimes have always been considered properly punishable with death ; and there are several instances, prior to the reign of the deposed King, in which they have been visited with capital punishment. With respect to persons of inferior rank implicated in the same treasonable acts, the punishment has in many instances been neglected, or wholly remitted.

Conviction is almost universally followed by confiscation of property, and sometimes involved that of the relations of the deceased.

Of adultery with the King's wives, which is considered a species of treason, two instances only are cited, in both of which capital punishments were inflicted upon both the criminals.

Of illicit intercourse with the King's concubines there are several instances, in which the delinquents have been sentenced to suffer severe corporal punishment, and sometimes the additional penalty of cutting off the hair or imprisonment, but the offence has never been punished with death.

Homicide.

The distinctions which exist in the law of civilized nations between the several species of homicide of course find no place here ; but if any principles can be said to have existed, the following seem to have been most generally observed :

Wilful and deliberate homicide is punished with death, and is considered to be homicide committed deliberately and intentionally, without sudden provocation, and not in defence of self or property against a violent and unlawful act.

If two or more persons quarrel and one of them be killed in the affray, it is

held to be culpable homicide, and punished by whipping through the street of Kandy, and imprisonment in a distant village.

In such cases it does not appear that minute enquiry was made in order to ascertain the aggressor, or the degree of provocation given. In the majority of instances, which are numerous, the offender was punished in the manner above stated, but in no instance which I can learn with death.

But if, after the termination of a quarrel and separation of the parties, one attacked and killed the other, it is considered wilful and deliberate homicide, and liable to a capital punishment.

If two or more persons join in the commission of a robbery, and one of them commits homicide, the slayer is held guilty of wilful and deliberate homicide, the rest only guilty of the robbery.

If a man kill another who is come to rob his house by night, the homicide is generally held to be not altogether free from blame, and liable to slight punishment.

But two instances of such homicides which occurred in Kandy, and were brought under the King's cognizance, passed without any animadversion whatever.

If a man kill on the spot another found in the same room with his wife, under such circumstances that adultery is presumable, the homicide is held to be justifiable, and the perpetrator entirely innocent.

If a man kill another by misadventure, the homicide is held to be in a slight degree culpable ; such accidents occur not unfrequently amongst the natives in hunting and shooting, and the offender is usually sentenced to a slight corporal punishment, or imprisonment and fine, as a warning to others against negligence.

Maiming or depriving of an Organ or Member.

Of this crime committed by an individual I can learn no instance, but it is held to be one of such magnitude, as can be competent only to the King's jurisdiction.

Robbery.

The instances in which robberies have been punished with death are few, and all of which I have obtained information took place in the reign of the deposed King.

In other cases they have been visited with corporal punishment, imprisonment, and fine, in severity proportioned to their supposed atrocity. The

most atrocious are held to be those committed upon the treasures or other property of the King, of temples, or of priests.

Housebreaking, Highway Robberies, and those attended with Personal Duties.

The most atrocious robberies, and necessarily the first mentioned, being reported to the King, are usually punished by whipping through the roads of Kandy, and imprisonment in a distant village in the country.

Other robberies, which are not deemed of sufficient importance to report to him, are heard and decided by the Great Court, by the *Adikars*, and the several chiefs, and minor robberies by the provincial head men; and the offenders are sentenced at their discretion, according to their respective powers, to corporal punishment, imprisonment, or fine, all or either.

But they sometimes escaped with no other punishment than imprisonment till they make satisfaction for the stolen property, and pay the fixed damages.

It is an invariable rule that the robber must restore the stolen property or its value to the owner, and except in petty thefts of fruits, vegetables, betel, &c., must pay fixed damages of thirty *ridi*, called *Wandiya*, and ten *ridi*, being double the sum which the owner is supposed to have paid to an informer for discovery, and which he recovers although there was no informer.

Sometimes the chief recovers the property for the owner by imprisoning the robber in the stocks. Sometimes he delivers the robber to the owner, especially if he be a man of some rank, who has a right to bind, confine in the stocks, and beat him in moderation till his property or its value have been restored with damages, or security given.

A fee or present is frequently promised before hand, and given by the owner to the person in authority, who has been instrumental in recovering it.

If there be evidence which leaves no doubt of a prisoner's guilt, and especially if he be a man of bad character, the chief, and sometimes the person robbed, inflicts corporal punishment to extort confession of accomplices and discovery of property stolen, but they would be liable to severe punishment for ill treating a respectable and innocent person.

If property found be disputed between the prisoner and the owner, and there is no proof, it is sometimes decided by oath at the temple.

In cases of cattle stealing, the owner invariably recovers from the robber one head of cattle in addition to his own, or two for one, as well as the supposed value of the service of the stolen animal, for the period during which he was deprived of it, besides the damages of forty *ridi* above-mentioned.

Arson.

Of arson I can hear of no case which was proved, but one instance of maliciously burning sheaves of *paddy* ; according to the general principle, the criminal would be sentenced to suffer severe corporal punishment and imprisonment, and to make satisfaction for the property destroyed.

Sacrilege.

The instances of sacrilege within recollection are few, but the offences being reported to the King, were in general punished by whipping through the streets of Kandy and imprisonment.

One instance of striking a priest was punished by amputation of the finger.

Forgeries, false Coining, and uttering false Coin.

There are three cases within memory of convictions for forging King's *sannasses*, and a *Desave's sitta* for land, and one for coining and uttering false *pagodas*.

The offenders suffered severe corporal punishment, with the addition of imprisonment in two of the cases.

In another case of uttering false coin, the culprit was an inhabitant of *Colombo*, and was delivered to the Dutch Ambassador.

Adultery.

The crime is strictly prohibited by the precepts of their religion, but below royalty, rarely meets with punishment from the chiefs.

First, because the husband is ashamed to publish the disgrace to the world by complaint ; and secondly, because he has the power of taking vengeance himself by beating, wounding, or even killing the man whom he finds in the same room with his wife, under such circumstances that adultery is presumable.

Hence the seizure and punishment on the spot of the adulterer is generally left to the injured husband. But when complaint is brought forward by him, that another maintains illicit intercourse with his wife, or frequents his house with that design, no proof of the fact is called for, but the accused is dismissed with reproof and threats ; and perhaps, if evidence be adduced, with a slight corporal punishment, imprisonment, and fine.

Rape.

This crime was not considered as one of a very atrocious nature. In two or three instances in which it was committed upon female attendants of the palace, the offenders, who were of some rank, suffered by the King's order severe corporal punishments, with imprisonment, or temporary removal.

Of other cases which occurred amongst common individuals, the Kandyan chiefs severally took cognizance, and sentenced the offenders to corporal punishment not very severe, or to imprisonment and fine.

Assaults and Quarrels.

These cases of course were very numerous, and were settled frequently by the provincial head men, and frequently by the Kandyan chiefs.

Slight corporal punishment was sometimes inflicted, but more usually the offenders were punished by fine.

In affrays there was a fixed fine of seven *ridi* and a half for spilling blood, called *lay dade*. In other quarrels of mere abuse, or blows without drawing blood, the customary fine was three or five *ridi*, and if the two adverse parties were found to be in fault, fines were sometimes levied from both.

Manufacturing, selling, and drinking Arrack and Toddy.

The use of spirituous liquors is contrary to the express precepts of their religion, and the practice has been often prohibited by the Kings within the last fifty or sixty years, as being sinful, and productive of profligacy, quarrels, and other crimes.

Many instances are stated to have occurred within that period in which, having been brought to the King's notice, the offenders were punished by whipping through the streets of Kandy and imprisonment; but such practices were frequent in many parts of the country, and were punished by the chiefs and head men, according to their discretion, by slight corporal chastisement, imprisonment, or fine.

Gambling.

This vice was also strongly prohibited. It prevailed almost exclusively in Kandy and its environs, within the river, and principally amongst the Malays. It was usually punished by whipping and imprisonment.

Elephant Slaughter in the Upper Districts, and the Province contiguous to Kandy.

All elephants are considered the property of the crown, and they are employed in the King's service, for his recreation, at public festivals. Hence the slaughter of them, especially of tusked and large elephants, is reckoned amongst the most heinous offences.

It was usually punished by whipping through the streets of Kandy, and imprisonment in a distant province.

But if the elephants be small and of little value, by slighter corporal punishment, and imprisonment in Kandy.

In the districts surrounding Kandy, independently of this punishment, the *Kuruwe* people of *Kengalle* had a right to plunder the house and premises, and appropriate to themselves all the *paddy* and other moveable property of the offender.

Hunting and killing of Animals.

This practice was declared unlawful in the upper districts within the last fifty or sixty years, on the ground of being contrary to the precepts of religion; and in some instances was punished by whipping through the streets of Kandy, and imprisonment in a distant village. In other cases which came under the cognizance of the chiefs, the transgressors escaped with slighter corporal punishment, or imprisonment and fine.

The practice, however, was continued in secret, and was in fact connived at by the Kandyan chiefs, to whom a portion of the slain animal was usually presented, in neglect of which the hunter subjected himself to the penalty.

Huniyam.

This is a species of sorcery, and was held in general abhorrence.

It consists in making an image or delineating a figure to represent an enemy, or in writing his name, and using diabolical arts, ceremonies, and imprecations, whereby it is believed that skilful persons have the power of occasioning his death, sickness, or some heavy calamity.

It is said that in the reign of NARENDRASINHE several persons suffered executions for this crime, and that their lands were confiscated or delivered to the injured party. In the reign of the King KIRTERI, five persons suffered execution for having practised this sorcery against the King, as an act of treason.

But since that period the general belief in the possession of such diabolical powers seem to have declined.

If the proof, as usually happened, was only presumptive, the accused was directed to swear by oil ; and if convicted, he, according to ancient custom, suffers death, or becomes an outcast, and his land is confiscated or assigned to the injured person.

But within the last fifty or sixty years no one has suffered execution for this crime ; the convictions have been very few, and in no more than one or two instances have the lands been assigned to the adversary.

Of late years, complaints of *Huniyam* are not frequently made, or still more rarely brought to trial. The accusers can seldom furnish proof of the fact, and the case is usually settled by the chief forbidding him to repeat the imputation.

Slander affecting Caste.

The infamy which attaches to loss or degradation of caste among the nations of India is well known.

This may be occasioned by two distinct acts in the person of high caste.

First, By eating in the house of people of low caste.

Second, By a female having criminal connection with a man of low caste.

The connection of a man of high caste with a woman of low caste entails no such disgrace.

The first is considered of no great importance, and is easily overcome by denying or falsifying the slander, and by an order of the chief ; and, if necessary, by receiving a *pingo* from the people.

But not so the second.

It is said that, according to ancient usage, the disgraced family had only one resource left for wiping away the stain, *viz.* by putting to death the offending female, which was sometimes carried into effect, and the homicide was deemed justifiable.

But this barbarous custom was forbidden by subsequent kings, who directed that, upon such an occurrence, the parties should seek redress from the crown, since which time the practice has diminished ; and in several cases brought to the King's notice, when the fact was notorious and undeniable, the female was consigned as a slave of the crown to the royal village of *Gampala*, and the family was ordered to deliver some provision to the royal store, and by this act became purified.

For many years no such homicides have occurred in the districts near Kandy.

But in the *Saffregam Korles* five or six instances are remembered within the last twenty-five or thirty years. The persons who perpetrated them having voluntarily come forward and declared the deed to their *desavony* chief, were imprisoned; and being reported to the *Desave*, were discharged after payment of a fine, and after no long confinement, by his order, and it is believed with the King's authority.

For the reason stated in the case of adultery, such occurrences were not often made public. But if complaint be made that such a calumny has been spoken by another, he is sent for and examined, and usually denies or is made to deny the words imputed. The chief makes no enquiry to establish the fact, but to falsify it; reproves him for having spoken so in anger or malice, and forbids him to repeat it. The affair is terminated by directing the tainted family to deliver *betel* or provisions to his house, after which no one dares to utter a word against them.

Murder of Children.

The murder of children and exposure of children are said to have been at some periods not unfrequent, and they were committed chiefly by people of the poorest class, and upon one of the three following grounds.

1st. If from mere indigence, and especially having a numerous offspring, the parents thought themselves incapable of maintaining them.

2d. If any child were supposed to be born under an evil star, and hence to threaten misfortune to itself or to the family.

3d. If a child were the fruit of an illicit connection, which the mother was ashamed to own.

This crime was on different occasions strictly prohibited by the kings of Kandy.

But being in its nature difficult of detection it still prevailed, according to report, though not made public, chiefly in *Walapane*, *Uwa*, and *Saffregam*, and is believed to have been of rare occurrence in the other provinces, and in the districts contiguous to the capital.

I can learn one instance only of a person tried and convicted of this offence under the King's government, who was sentenced to severe corporal punishment at the *Gabadawe*, and then released.

Suicide.

Suicide is not unfrequent amongst the Kandyans, and is frequently committed under such circumstances, as shew an extraordinary contempt of life, and at the same time a desire of revenge.

The instances are chiefly those in which a person has suffered a trifling injury from another, such as if he has been slandered, if he has ineffectually endeavoured to obtain satisfaction for a claim, if his crops have been spoiled by another's cattle, or if the object of his affections has been given away to another. Ascending the tree, and on the point of perpetrating the fatal act, he proclaims aloud that such a person has done him such an injury, and that he dies on his account, under the idea that he shall draw down punishment upon the person who has injured him, as being the immediate cause of his death.

In such cases the person to whom the dying man imputed his death is called and examined with respect to the offence charged ; and if culpable, merely to suffer such penalty as would be awarded if no suicide had taken place.

But there are also instances in which a person threatens aloud, within hearing of the man who had injured him, that he is about to commit suicide for such a cause, but without the intention of committing it, and with the mere view of compelling satisfaction.

It has been observed that suicides are more frequent in *Uwa* and *Walapane*, but several instances have occurred in other provinces and in the districts near Kandy.

Of Oaths.

It is the object of oaths to obtain, in cases doubtful to human understanding, a judgment of the deity, which it is supposed will be given by a manifest sign or infliction when imprecated with solemn ceremonies.

The following species of oaths are in most frequent use :

1st. By hot oil.

This oath can be administered only by authority of the *Adikars* in the districts surrounding Kandy, of the *Desaves* in their respective *desavonies*, and of the *Wanniyars* of *Nawerekalawiga*.

The same power has been exercised by the principal *Mohottales* of *Saffregam*, *Seven Korles*, and *Wellasse*. It is forbidden in the town of Kandy, and takes place either at the *Diwurum Bogaha* at *Ampitiye*, the *Bogaha* at *Ganoruwe*, or the *Bogaha* at *Gowagodopitiya*.

The two parties in the suit being directed to swear, abstain from all pollutions and purify themselves during three days. On the day appointed, which is either Wednesday or Saturday, they proceed to the house of the *Adikar*, when two *olas* called *dewe sitta* have been properly written and prepared, one in the name of each party, asserting the truth of the point upon which his right depends, and denying the same of his adversary, declaring that he has employed no sorcery or medicines, and calling the gods to witness the truth of his words.

They are next sent with a messenger of the *Adikar* to the four temples in Kandy, or sometimes only to that of *PATTINI*. In presence of the *Kapurale* they offer each a *tangama* (eighteen *pice*) upon the altar, and call the gods to witness that the contents of the *ola* are true, and the *Kapurale* then invokes a manifestation of evidence. From the temple they proceed with three messengers to the spot where three sticks of the lime tree are planted to hold the earthen vessels, in the centre of a small enclosure formed by stakes and white cocoa-nut leaves; two or three cocoa-nuts are brought by each party.

The oil is extracted from them and poured into the vessel, and cow-dung mixed with water and strained is prepared in another, and the fire kindled, a friend or servant from both parties assisting in all these operations. The officers having ascertained that the oil and cow-dung water are boiling hot by immersing in them a strip of white cocoa-nut leaf, each litigant advancing from opposite sides with the two *dewe sitta* bound respectively to the lower part of their right arms, breaks the fence of white *olas*, calling the gods to witness as before at the temple that the contents of the *sitta* are true, and seat themselves near the fire.

First the plaintiff touches the burning oil with the tip of his fore or middle finger usually three times in succession, and sprinkles a drop or two upon a leaf which is placed beside it for the purpose of this proof, and then touches and sprinkles in like manner a little of the water impregnated with cow-dung; immediately after the defendant performs the same operation; and the hands of both being wrapped up with a cloth tied round the wrist, they are conducted before the Great Court, or the *Adikar* or *Desave* who sent them. Here their fingers are minutely examined, and if nothing is perceptible, their hands are usually wrapped up a second time with a wetted rag or piece of lime, and re-examined the next morning or evening, for the purpose of determining with greater certainty. After the examination

is terminated, they both again repair to the temple with a *pingo* of fruits, and become absolved from their interdiction ; if both persons, or if neither of them be burnt, the land is equally divided between them. If the hand of one only be burnt he loses the land, and both *dewe sitta* are delivered to the other, and if required a *sitta* of decision ; the *Kapurale* and officers who attend are entitled to fees of one *ridi* each, the chief to a fee of four *ridi* for the *dewe sitta*, and after their return from the ordeal to five or seven and a half *ridi* from both.

Sometimes, at the desire of one or both, the parties are sent to swear at some celebrated temple in the country, as *Embakki*, *Dodanwele*, *Alawatugoda*, *Alutunwere*, *Dumbulle*, and rarely *Kattregam* ; and sometimes in the *desavonies* the arms are carried from the temple to a small ornamented hut erected for the purpose in the disputed land, and the ceremony performed in the same manner.

2d. By *Paddy*.

When the *paddy* of the disputed field is ripe, a small sheaf is set apart by the possessor in presence of his adversary ; and on a day appointed by the chief, both parties proceed to the spot with a messenger, and the arms are brought from a temple to a decorated hut within it. After offering a small sum of money, both parties together separate the grains from the ears, beat out the rice in a mortar, boil it, and eat a small quantity, repeating frequently during the performance of all these works the *dewe wasagama*, which is brought in writing by the messenger, containing the solemn assertion of their respective rights, and imprecation that if their words be false, the gods will inflict a calamity upon them within seven or fourteen days, as the term may have been fixed.

They depart to their homes and live with the greatest circumspection during the period, and at the expiration of it appear before their chief. They had previously declared and caused to be written any existing sickness or loss in their respective families, and each now relates any thing which may have befallen his adversary since the oath : and if any serious evil prove to have happened, as the death or sickness of himself or near relation, or any of his cattle ; if his crops have been spoiled, or property lost ; if a building or a fruit tree have fallen, he is held to have lost.

If evil have befallen both or neither, the land is divided. After appearing they proceed to the temple from whence the arms were brought, and making offerings and imploring protection, become absolved as before.

Sometimes, with a view of rendering the trial more solemn and certain, at the season of cultivation a small portion of the field is selected, which both parties plough and sow together; and when the *paddy* ripens, proceeding to the spot with a head man or messenger, reap and thrash it together, and perform the other processes in the manner above described.

3d. By earthen vessels.

With the authority of their chief both parties repair to the disputed field; the person in possession sets an earthen vessel upon a frame raised on three cross sticks, and places a cocoa-nut on it, calling the gods to witness that the field belongs to him and not to his adversary, and imprecating a calamity, if his words be false, in seven or fourteen days.

His adversary removes the vessel and cocoa-nut, casts away the former, breaks and eats the latter, repeating the like imprecations, or sometimes the cocoa-nut is divided between them; and the case is judged (as in the oath by *paddy*) by the misfortune which may be proved to have befallen either party within the term prescribed.

4th. By drawing white *olas*.

This is practised in case of dispute regarding the limits of two adjacent lands. The litigants repair to the spot by order of the chief, and accompanied by his messenger, or a head man. One of them hangs a string of white cocoa-nut leaves upon two or three stakes planted on the line which he asserts to be the limit, and proceeding along it, cuts a furrow in some parts, and imprecating misfortune within seven or fourteen days if his words be false; or sometimes the string of *olas* is laid on the ground along the whole length of the limit. The other follows him immediately and removes the white *olas*, denying that it is the true limit, and lays or plants them upon his own asserted boundary with the like imprecation, and the case is decided as in the second and third modes.

5th. By striking the earth, casting mud and water.

Sometimes without the authority of the chief, and by mutual consent, both parties repair to the field, and together strike the earth three times with both hands (or cast up mud or water into the air, and sometimes at each other), each calling the gods to witness that the land is his, and imprecating misfortune in seven days if his words be false.

If a signal misfortune befall either, he will sometimes resign his claim without further complaint.

There are still two other modes which are said to have prevailed in ancient times, but have fallen into disuse now.

6th. By *Reepolle*, or red hot iron.

The litigant parties successively take in their hands a red hot piece of iron laid upon a leaf, and proceeding seven paces, cast it away; if the hand of either be burnt he loses the suit.

7th. By the *nága*, or *cobra de capella*.

A *cobra de capella* is put into a vessel with a narrow neck, and some silver *fanams* are cast in by an indifferent person.

Each party in succession takes out the *fanams* with his hands; if either be bitten, it is a judgment against him.

Of Lands and Landed Tenures.

It is well known that the service tenure prevails throughout the Kandyan provinces.

The possession of land is the foundation of the King's right to the services and the contributions of the people, and *vice versa*. In general persons not possessing lands are liable to no regular service or duties, but in some instances to light and occasional service. Lands which properly subject the possessor to regular public services and contributions are low *paddy* lands, which can be cultivated every year, but not (with some few exceptions) gardens or high grounds; and *Lekam Miti* or registers of persons liable to regular service are kept in the hands of the chiefs of the provinces of many departments, to which they respectively belong. He who openly abandons his land (which sometimes occurred, particularly in the latter years of the late King's reign, on account of the severity of the duty) is no longer called upon to perform service or to pay duties. Service land thus abandoned is strictly the property of the Crown, and in some instances the King has exercised this right by taking the crops and by regranting the land. But according to more general custom, the crop is appropriated or disposed of by the chief of the province, village, or department in which the land is situated; or it is regranting by him to another, subject to the same service, frequently on payment of a suitable fee. Land abandoned, if reclaimed by the original proprietor or even by his heir, is usually restored on payment of a suitable fee, unless it has been definitively granted to another, or possessed many years by another family performing service. No person retaining his land can

without the King's permission change his service, that is, abandon his proper department and service and resort to another.

All lands are alienable by the proprietor, but continue liable to the same service; hence persons of high caste seldom purchase the lands of the low classes, especially if the service be that of any handicraft or menial description.

All service lands may descend to or be acquired by females, who either pay a commutation in money, or, if required, provide a substitute to perform personal service.

Rajakarya, which may be properly interpreted King's duty, implies either the personal service, or the dues in money or in kind, to which any person or any land is liable.

Personal service was in many instances commuted for a money payment, which was considered the legal perquisite of the chief.

1st. Universally, in the case of the *Alapatta* and *Herwa Wasam* people, and *Kodituwakka* people of the *desavonies*; of the *Lekam* people, or persons of some other departments in the upper districts, who perform in rotation regular *mura*, or duty at the house of their chief or at other fixed stations, all absentees beyond the number required to attend paying a fixed sum called *mura ridi*, which will vary in different places and departments from one to five *ridi* each, for fifteen, twenty, or thirty days.

2d. In the case of the same, and other persons, who were obliged to attend at public festivals at Kandy, and who paid to their chiefs each a fixed sum for failure.

3d. In case of the classes above-mentioned, some others when called upon to furnish timbers, erect buildings, or perform other public service; all absentees, whether excused by favour, or disabled by sickness, or withheld by urgent private concerns, pay a commutation in money called *higa*.

The chief being held responsible for the expeditious performance of the works assigned to him, the king seldom inquired minutely the number employed.

Hence will appear the reason upon which is founded the practice above-mentioned, of the chief receiving the crops or the emoluments to be derived from vacant service lands. But he could only dispense with the personal service, for it was an invariable rule, that the chief enjoying the benefit of the crops must deliver to the royal store the revenue chargeable upon the lands.

Every field, with few exceptions, has attached to it a garden, and a *jungle* ground called *hena*, which as a matter of course are inherited and transferred with it.

No specific term of years constitutes a prescriptive title to land, notwithstanding a vulgar saying which attaches validity to thirty years. But an undisturbed possession of many years is considered in all cases as a strong presumptive proof in favour of the possessor.

Of the Species of Lands.

The Singalese word *game* properly signifies villages ; but in the Kandyan country it is also frequently applied to a single estate or a single field.

The latter is often called *pangurwa* or share.

Villages, properly so called, are of the following kinds :

Gabada-Game, a royal village.

It may be generally described as containing *mullettu* lands, which the inhabitants cultivate gratuitously, and entirely for the benefit of the crown ; and other lands which the inhabitants possess, in consideration of their cultivating the *mullettu*, or rendering certain other services to the crown.

Wihare Game, a village belonging to a temple of Buddha.

Dewale Game, a village belonging to a temple of some heathen deity.

Vidane Game, a village under the order of a *Vidan*, and containing usually people of low caste, liable to public services.

Ninda Game, a village which for the time being is the entire property of the grantee or temporary chief ; if definitively granted by the King, with *sannas*, it becomes *parveny*.

It generally contains a *mullettu* field, which the inhabitants, in consideration of their lands, cultivate gratuitously for the benefit of the grantee ; and besides are liable to the performance of certain other services for him.

Gallat Game, a species of villages in the lower part of the Four *Korles*, the Third *Korle*, a part of *Saffregam*, much in the nature of a *Ninda* village, and sometimes bearing that name.

Other villages and lands, which it is unnecessary to specify here, are denominated from the department to which they belong, as *Kuruwe Game*, or *Panduwa Mullenge Game*, or *Panduwa*.

Kela is a royal field or land sown on account of the Crown.

In royal villages it is the same as the *mullettu*.

Parveny land is that which is the private property of an individual pro-

prietor, land long possessed by his family, but so called also, if recently acquired in fee simple.

All lands in the Kandyan country being subject to service, the distinction of service *Parveny* is still known.

Mullettu land is that field which is sown on account of the King or other proprietor, temporary grantee, or chief of a village, as distinguished from the fields of the other inhabitants of the village, who are liable to perform services or render dues.

Mullettu land is of two kinds, *viz.* :

1st. *Ninda Mullettu*, which is sown entirely gratuitously for the benefit of the proprietor, grantee, or chief, by other persons, in consideration of the lands which they possess.

2d. *Ande Mullettu*, which is sown by any one without obligation, on the usual condition of giving half the crop to the proprietor.

Nila Pandurwa, is the land possessed on condition of cultivating the *Mullettu*, or performing other menial service or both, for the proprietor, grantee, or chief of a village. The possessor of such land is called *Nilakaraya*. In some instances he is the proprietor, and cannot be displaced so long as he performs the service; in others, a tenant at will and removable at pleasure.

Asweddume, or *Delapata*, is land lately brought into cultivation as a field, or more recently than the original field. In most instances the *Asweddume* of one person is not of any considerable extent.

In the royal villages and the *Vidane* villages, and in some other instances in the upper districts, the possessors of them perform some King's service, but not so much as the proprietors of original lands.

If cultivated by a stranger from the estate of another, particularly in the *desavonies*, he pays by agreement to the proprietor a small annual sum, and besides assists him in country work, and attends him on a journey, receiving victuals; unless inscribed, as rarely happens, in the *Lekam Mitiya*, he performs no public service for it. If cultivated by the proprietor performing service, he is liable to no extra service for it.

Pidarwilla is land offered by individuals to temples, and there are many of this description in all parts of the country. They are usually *Asweddume* of small extent, more rarely small portions of the original service land.

It is held, that in the upper districts they should properly not be offered without the King's permission; but it was sometimes done only with the leave of the chief. In the *desavonies* they are usually offered with the con-

sent of the *Desave* ; but sometimes without it, if of trifling extent. As no King's service or revenues are diminished by the act, the King's sanction was deemed less important.

Purappadu Land is land vacant, or without owner. Land becomes *Purappadu* either in failure of heirs, or by abandonment, or by forfeiture ; but if taken to the crown, as usual in the latter case, it is called *Gabada Game*.

Anda Land is that which is delivered by the proprietor to another to cultivate, on condition of delivering to him half the crop as rent ; this is the usual condition on which fertile fields are annually let.

Otu is of three kinds.

1st. A portion of the crop equal to the extent sown, or to one and a half, or double the extent sown, in some *paddy* fields or *chenas*. It is the usual share paid to the proprietor by the cultivator from fields which are barren, or difficult of protection from wild animals, particularly in the Seven *Korles*, *Saffregam Hewahete*, and some *chenas* in *Harispatta*. In many royal villages in the Seven *Korles* are lands paying *otu* to the Crown.

2d. The share of one-third paid from a field of tolerable fertility, or from a good *chena* sown with *paddy*.

3d. The share which the proprietor of a *chena* sown by another with fine grains cuts first from the ripe crop, being one large basket full, or a man's burden.

Hena (or, as it is commonly called, *chena*) is high jungle ground, in which the jungle is cut and burnt for manure after intervals of from five to fourteen years, and the *paddy* called *elwi*, or fine grains, or cotton, and sometimes roots and other vegetables are cultivated ; after two, or at the most three crops, it is abandoned till the jungle grows again.

XI.—*A Description of the Temple of JAGGANNÁT'HA * and of the RAT'H-JÁTRÁ, or Car Festival. By F. MANSBACH, Esq., in a Letter to Lieutenant-Colonel WALTER RALEIGH GILBERT, by whom it was communicated to the ROYAL ASIATIC SOCIETY.*

Read 3d of December 1831.

To Colonel Gilbert.

Pooree, the 27th October, 1827.

MY DEAR SIR :

Although you personally have visited *Jaggannát'ha* and its famous Hindu temple, yet I am sure that some account from a person who for several years has resided there will not prove entirely uninteresting, and I therefore thought it best to employ my evening leisure hours to put to paper the information I have been able to collect from time to time, trusting to your kindness and indulgence with regard to the imperfections in style, language, and, in fact, every thing else.

The temple was erected by Rajah ANUNG BHIM DÉO, and completed in A.D. 1198. All the land within twenty miles of the temple is considered holy; but the most sacred spot is enclosed with a stone wall twenty-four feet in height, and forms nearly a square, two sides of which measure each six hundred and seventy-six feet, and the two other six hundred and sixty feet in length. Within this area are about fifty temples dedicated to various idols; but the most conspicuous consists of one lofty tower, two hundred feet high and twenty-eight feet square inside, and is called the "*Bará Dewal*," and two adjoining stone buildings with pyramidical roofs. The idol JAGGANNÁT'HA, his brother BALABHADRA, and his sister SUBHADRÁ, occupy the tower. The first pyramidical building, which is sixty feet square, is connected with the tower, and is the place where the idol is worshipped during the bathing festival (*Snán-Játrá*), and adjoining it is a low building on pillars, with a fabulous animal in the centre, which is intended as an awning to shelter the entrance from the rays of the sun; and after this again is a second building with a pyramidical stone roof, where the food prepared for

* *Vulg.* Juggernaut'h.

the pilgrims is daily brought previous to distribution. The priests and Brahmans connected with the temple pretend that the latter building has been removed hither from *Kanarak* (the black pagoda), and is called the *Bhóga-Mandap*. The art of arching appears to have been entirely unknown at the time the temple of *Jaggannát'ha* was built, as these buildings have very large iron beams, and their roofs consist of successive layers of stone laid flat, and in some instances the successively projecting layers were continued till one single stone could reach across the opening and close it up. The roofs are ornamented in a singular style, and represent monsters which can only be understood by a drawing. The walls of the temple, which are visible beyond the enclosure, are covered with statues of stone, of which several represent the famous Hindu God MAHÁ DÉVA, with his wife PÁRVATÍ, in attitudes so grossly indecent, that it seems surprising that any superstition could debase human beings to such degree, as to make them introduce into the most sacred places such filthy and obscene representations.

Each side of the boundary wall has a large gateway in the centre, but the grand entrance is in the eastern face, or the "*Singh-Darwáza*," and there is a second enclosure within, the area of which is raised about twenty-five feet. Close to the outer wall there is a very elegant stone column of basalt, the pedestal of which is highly ornamented, the shaft being of a single stone exhibiting sixteen sides, the diameter about eight feet, and the whole column measuring about forty feet; on the top is a figure of HANÚMÁN, a Hindu deity, who assumed the shape of a monkey. This extremely well executed pillar was originally erected before the great gate of the temple of the Sun at *Kanarak*, and when most of the buildings of that temple were relinquished, it was removed to *Jaggannát'ha*; and the original ornament is said to have been the figure of ARUNA, the charioteer of the Sun, and the pillar is thence called *Aruna-khambhá*.

Near the north-east angle of the boundary wall of the temple there is a lofty arch of pot-stone, which is used during the festival of the *Dól-Játrá*, when three massive silver images are swung backwards and forwards, the swing being fastened to the stone arch by brass chains.

You may easily imagine that a very large establishment of priests and others are attached to the temple, but you will perhaps feel surprised when I state their number to be at least three thousand families, exclusive of four hundred families of cooks to prepare the holy food called *Maháprasád*.

The provisions furnished daily for the idol and his attendants consist of

two hundred and twenty seers of rice, ninety-seven seers of *kallai*, twenty-four seers of *míng*, a hundred and eighty-eight seers of clarified buffalo's butter, ninety seers of molasses, thirty-five seers of vegetables, a hundred seers of milk, thirteen seers of spices, twenty seers of salt, and twenty-two seers of lamp-oil. This holy food is presented to the idol three times a day, and the gates are cautiously shut during this presentation, and none but a few personal servants of the idol are allowed to be present. This meal lasts for about an hour, during which period the dancing-girls attached to the temple (consisting in number of a hundred and twenty) dance and sing in the room with many pillars. On the ringing of a large bell the doors are thrown open, the food is removed, and the Rajah of *Khurda*, as high-priest of the temple, divides it with the priests. The *Maháprasád* prepared for sale to the pilgrims, or bespoken by the inhabitants, is not brought into the large tower, but collected in the *Bhóga-Mandap*, where it can be seen and properly sanctified by the idol from his distant throne. In addition to this food, a very considerable extra quantity is allowed for great festivals, and nothing can pollute the food prepared in the temple and sanctified by the idol JAGGANNÁT'HA ; but indeed nothing can be more convenient than such a belief, as of course you are aware that Hindus in general must eat their food where it is cooked, and a thousand things may pollute it. The consequence is, that cooks are employed to prepare food for most of the pilgrims, and at a price which of course varies according to the demand, but is always highest during the festivals ; and a few days before the festival of the *Rat'h-Játrá* food is cooked and sanctified for at least a hundred thousand pilgrims : and it will be easily credited that on such occasions the above-mentioned four hundred families of cooks have as full employment in procuring food, as the three thousand priests have in attending the ceremonies of the pilgrims.

Besides various minor, there are thirteen principal festivals celebrated at *Jaggannát'ha* during the year, *viz.*

1. *Chandana-Játrá* The powder festival.
2. *Snán* do..... Bathing do.
3. *Rat'h* do..... Car do.
4. *Báhara* do..... Do. returning.
5. *S'ayana* do..... Lying down do.
6. *Janma* do..... Birth do.
7. *Kunja-griha* do..... Arbour do.

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8. *Rása Játrá* Dancing festival.
9. *U'ní do*..... Warm clothing do.
10. *Abhishéca do*..... Anointing do.
11. *Macara do*..... The festival of Capricorn
12. *Dól do*..... The swinging festival.
13. *Rama Navami do*..... The festival of the birth of RÁMA.

The powder-festival, swinging, bathing, and *Rat'h* festivals, are those most attended.

Such Hindus as perform the pilgrimage to *Jaggannát'ha* contrive to arrive from the month of October to the end of June, as the roads are extremely bad, most of the districts being inundated, and very unhealthy during the rains. Some pilgrims go and return after four or five days, while again others sojourn for two or three months. After the preliminary ceremonies are gone through, and the fees paid, the pilgrim, accompanied by his priest, goes and looks at the image ; he next bathes in the sea, and then returning to the temple, purchases some holy food called *Maháprasád*, sanctified by JAGGANNÁT'HA himself, and with it performs the ceremonies for his deceased ancestors. During his stay he performs and attends daily new solemnities, and makes offerings to JAGGANNÁT'HA through the priests ; the officiating priests supply him for payment with food ready dressed, which is considered particularly nutritious, having been first presented to JAGGANNÁT'HA, who eats *by proxy* fifty times each day. The pilgrim or penitent also feasts the priests, and is permitted to eat with all descriptions of pilgrims of whatever caste they may be ; and various stories are told and causes assigned, all equally irrational, to account for the singular exception of permitting an act to be done here which, if performed anywhere else, would render the individual the most miserable outcast. That excess of fanaticism, which is stated erroneously in several missionary accounts to prompt pilgrims to court death by throwing themselves in crowds under the wheels of the car of JAGGANNÁT'HA, has either never existed, or has long ceased to actuate the present worshippers of that idol. It is true that, during four *Rat'h* festivals I have witnessed, three cases of this revolting species of immolation have occurred : but I may also be permitted to observe that one of them was doubtful indeed, and should probably be ascribed to a mere accident ; and in the other two instances the victims had long been suffering from that excruciating complaint the leprosy, and had chosen this mode of ridding themselves of the burthen of life in preference to other modes of suicide.

The waste of human life occasioned by pilgrimage, though doubtless very melancholy in an unfavourable season and when the *Rat'h* festival occurs late, has nevertheless been greatly exaggerated. Some old persons come to die at *Jaggannát'ha*, and many measure the distance from their homes to *Jaggannát'ha* by their own length on the ground ; but besides all these voluntary sufferings, many endure great hardships when travelling, from bad food, &c. if they are not well supplied with cash. At *Jaggannát'ha* itself the poor and indigent pilgrims are extremely well taken care of, and in cases of sickness supplied with medical aid, medicines, and food gratis, and nothing is left undone by Government to add to their comforts, and secure them against the oppressions of their own rapacious priests and *Pandits* ; and I can assure you that the pilgrims are aware of, and greatly thankful for the liberality of Government.

We have some missionaries down here, who, with the Bible in their hand and abundance of zeal, walk forth at *Jaggannát'ha* and into the neighbouring fields and villages, expecting that their well-meant exhortations are to convert the heathen ; but nothing can be more fallacious than the idea, that a Hindu who has travelled a couple of thousand miles from his home to worship the idol of *Jaggannát'ha*, should become a convert to Christianity at that place ; and the missionaries might just as well leave this district at once, where, after five years zealous labour, not one native has been converted by them. The practice of a missionary haranguing a mob in a public street is, in my humble opinion, one of the worst modes of teaching and converting that could possibly be adopted. I have, however, heard these very same Baptist missionaries assert, that the natives do collect and listen with the most apparent interest and greatest attention ; but so I really believe they would to any stranger on any other subject, for you are aware that the natives in general possess great curiosity, and a vast deal of what is commonly called good nature. These same missionaries further state, that the natives receive their religious tracts or pamphlets with thanks ; but so they would receive any other paper, for they are the most inquisitive race upon earth, and, from my acquaintance with the native character, I cannot after all infer, from their listening to the one and receiving the other, that they are one iota nearer to Christianity. The natives in general are great idlers, especially the pilgrims at *Jaggannát'ha*, who have no occupation there but to worship the idol, and would for the sake of gossiping, of which they are immoderately fond, run after, visit, and listen to any missionary ;

but as to what they have heard, it has as much effect upon their mind as the passing sea-breeze at *Pooree*, although perhaps a missionary, bent upon conversion, may, from their professions, believe that he has made some impression upon them, for you of course must know what adepts the natives are in the meanest dissimulation, and how very perfect in flattery. I assure you I have seen a Hindu from the Upper Provinces most devoutly listen to a discourse held by a missionary in the public street at *Jaggannát'ha*, beg a tract, and upon the missionary's retiring, run to the temple-gate, throw it away at the threshold of the temple door, and fall down with his forehead on the floor: this is what I have seen, and needs no comment from a simple person like me.

In conclusion, I shall offer a short sketch of the *Rat'h* festival, such as celebrated at this most famous place of Hindu worship. On the new moon of the month of *A'shár* this grand festival is celebrated, and three large *Rat'hs*, or cars of wood, are prepared for the occasion, of which the first has sixteen wheels, each six feet in diameter; the platform to receive the idol JAGGANNÁT'HA is twenty-six feet square, and the whole car is fully forty feet high from the ground. The wood-work is ornamented with images of different idols and painted, and the car has a lofty dome covered with English woollens of the most gaudy colours, which are bought at the import warehouse in Calcutta; a large wooden image is placed on one side as a charioteer or driver of the car, and several wooden horses are suspended in front of the car with their legs in the air. Six strong cables are fastened to the *Rat'h*, by which it is dragged on its journey. The concourse of pilgrims is always very great, and every precaution is taken by the authorities to prevent accidents; and I am happy to add that the humane exertions of the officiating commissioner and the magistrate have been amply rewarded, as not one accident has occurred in my time by the admission of the pilgrims to the temple: and as only Hindus are admitted within the temple, it is necessary to trust to the priests so far as regards the management and precautions inside. A loud shout from the multitude announces the approach of the idol JAGGANNÁT'HA, who is carried from the temple by a number of priests appointed for that purpose by the high priest, and generally called *Dytas*. A short time after, the Rajah of *Khurda*, as hereditary high priest, makes his appearance in a state-palankeen of a strange construction, and followed by large state elephants, and generally alights near the *Rat'h* of the idol BALABHADRA, which, together with the idol SUBHADRÁ, are placed

upon two separate *Rat'hs* like that of JAGGANNÁT'HA, except being a little smaller, the one having only fourteen wheels and the other twelve wheels. The Rajah is surrounded by a large train of priests, and immediately prostrates himself before the idol JAGGANNÁT'HA, amidst the shouts of the pilgrims and the piercing notes of the shrill silver trumpets ; he then with a broom sweeps the floor of the car, and is presented by the priests with a silver vessel containing essence of sandal-wood, with which the floor is sprinkled all around the idol, from whom he receives, as a mark of honour, a garland of flowers, which the priests take from the image, and put round the Rajah's neck. The Rajah then descends from the car, and proceeds bare-footed to the car of each of the idols, and endeavours to propel them forward, without which ceremonies it is supposed they could not afterwards be moved. On a signal being given a most active scene commences, and several thousand men, each holding a small green branch in his hand, come running to the *Rat'hs*, clearing their way through the crowd for a considerable distance in regular files, and immediately lay hold upon the cables, each man first having touched the car with his branch, and then, aided by the pilgrims (men and women), pull the *Rat'hs* to their destination, taking care to keep their faces towards the idol, who is driven to his garden-house where he resides, and is worshipped for four days, and then returns in the same way to the temple. The manifest helplessness of the block of wood during this journey does not in the least weaken the faith of the infatuated pilgrims, and I assure you that he is carried the whole journey amidst the shouts of his votaries, who are eager to worship the images, and will submit to any thing rather than being prevented from accompanying the idol on that occasion ; and if ever I should consider interference dangerous, I would not hesitate to pronounce it to be so on the occasion of this festival. Allow me however to observe, that the servants of the Government do not interfere with the interior economy of the temple, and far less with their clerical and spiritual ceremonies, which are entirely left to the Rajah of *Khurda* as high-priest. The servants only collect the tax, which is expended in keeping up the road to *Jaggannát'ha*, and for the rest limit their interference to the protection of the pilgrims against any oppressions of their priests and *Pandits* ; the fees paid by them are very moderate, are gladly paid by the wealthy, and never objected to by those in moderate circumstances, and the really poor and by far the greater number of pilgrims are invariably exempted and admitted gratis to the temple, and have the benefit of the

sheds constructed and kept up by the Government for the poorer order of pilgrims. Much is said against the Government countenancing such a system of idolatry ; but I solemnly and conscientiously declare, that I do not see how Government could with any propriety relinquish the control of the temple without subjecting its votaries to the most cruel oppressions, and which even the most efficient police would not be able to check. But I fear I have already said too much, and fear also that I have laid myself open to the charge of advocating my own cause, considering that I derive my daily bread in two hundred and fifty good full-weight sicca rupees per mensem for collecting the tax ; but I trust, also, that you will believe me, when I assure you that I have not once thought of myself by writing these ideas down : and besides, what does my opinion signify ? and who, in the name of God, would even do me the honour to call for it upon such occasions ?

The district of Cuttack* is generally considered very poor, and is perhaps the poorest of all the Honourable Company's possessions ; and much industry is promoted by the pilgrims who come down here, each at an average spending ten rupees cash in the district, and thus, at the very lowest calculation, bring more than 8,00,000 sicca rupees into circulation annually, where perhaps under other circumstances scarcely one-twentieth part of that amount would be circulated. It may be asserted that this is only to bring the cash from one possession into another, and that nothing is gained thereby ; but I believe the political economists have been puzzled in finding out means to bring the coin into circulation, and that much is gained in the way of trade by the pilgrims, not only at *Jagannātha* itself but also on the way to it, is certain.

I have once more to implore your indulgence with regard to the many errors, and no doubt numerous imperfections in this short sketch ; but the whole has been written in the evenings, by candlelight, and my eyes not being of the first order, and suffering from the glare of the sand during the day, frequently fail me in the evenings.

Believe me to be with great regard, my dear Sir,

Your very faithful and obliged servant,

F. MANSBACH.

* *Katak*, a royal metropolis. (Wilson.)

XII.—I. *Papers connected with a Latin Acrostic Inscription engraved on a Stone brought from the Great Temple at Kalabshe in Nubia, by Captain PETER RAINIER, R.N., C.B., A.D.C. to His Majesty, &c. &c.*

Read 19th of March 1831.

No.1. *Letter from Lieutenant-Colonel HENRY JOHN BOWLER, M.R.A.S., F.Z.S., to Colonel THOMAS DUER BROUGHTON, the (then) Secretary to the ROYAL ASIATIC SOCIETY.*

2, Old Cavendish Street, 12th March, 1831.

SIR :

I have now the pleasure to forward to you an extract from the private journal of my brother-in-law, Captain Peter Rainier, C.B., of the Royal Navy, giving all the information in his possession respecting the stone discovered by him in the great temple at *Kalabshe* in Nubia, having a Latin acrostic inscription cut on it, of which the accompanying is an exact copy.*

The information thus afforded by Captain Rainier will, I have no doubt, be considered interesting; and I beg to express a hope that some of the learned members of this Society may be able to decypher the copy of the inscription now before them, and favour us with a translation.

On accidentally looking over JOSEPHUS a few days ago, I met with two accounts of a Roman warrior named GALLUS; and as this in all probability is the same person mentioned in the inscription, and conceiving that they may possibly throw some light upon the subject, I shall insert them, as follows :

From the "Wars of the Jews," 2d book, 18th chapter, and 11th section. —"CESTIUS (GALLUS), the president of the province of Syria, sent GALLUS, the commander of the twelfth legion, into Galilee, giving him the command of as many forces as he thought equal to subdue that nation. This being accomplished, he returned with his army to Cæsarea."

Again, in the 4th book, 1st chapter, 5th section: speaking of VESPASIAN's siege of *Gamala*, in which the Romans lost a great many men: "But there was a centurion named GALLUS, who, during that discord,

* See Plate.

(alluding to the difficulty VESPASIAN had in retiring from the city), being encompassed about, he and ten other soldiers privately crept into the house of a certain person, when he heard them talking at supper what the people intended to do against the Romans, or about themselves (for both the man himself and those with him were Syrians), so he got up in the night time and cut all their throats, and escaped together with his soldiers to the Romans."

I beg to remain, Sir,

Your most obedient servant,

H. J. BOWLER.

No. 2. *Extract from the Private Journal of Captain PETER RAINIER, R.N., referred to in the preceding Letter.*

" I sit down to answer the questions in your letter respecting the stone I brought from Nubia. I find, on referring to my journal, that I arrived at *Kalabshe* on the 16th December 1828, and made the following remarks on the temple :—' It is on a large scale, and evidently built from the ruins of an ancient temple erected by THOTHMUS the Third. The present temple is Ptolemaic, but sculptured in the time of the Romans; the *propylon* is not detached, as is generally the case, but forms the entrance to the building, which it joins. You first enter a court nearly one hundred feet square, beyond which are four rooms of large dimensions (in the first of these was the stone bearing the inscription in question). From the paintings on the walls, this temple was evidently used as a Christian church at an early period; the representations are those generally seen in Greek churches, namely, God the Father, God the Son, numerous saints, and the horse of St. George: the *hieroglyphics* have been carefully plaistered over to enable them to depict the same; on removing the composition, *they* do not appear to have been cut a week.' The acrostic inscription, of which I sent you a copy, was engraved in the time of HADRIAN, in honour of GALLUS, one of his generals. The stone when I brought it away, as near as I can state, was five hundred weight; at Cairo I had it cut, and it now weighs about two hundred. It is a hard grey sand-stone. Above the inscription (in two places) the Greeks have cut the double triangle, I suppose by way of sanctifying it, previous to using the temple as a place of worship. This is all the information I can give you respecting it.

N.B. *Kalabshé* is about thirty-five miles above *Assouan* (or *Syène*), the boundary of Egypt."

(Signed) P. RAINIER.

Southampton, March 8, 1831.

No. 3. *A transcript of the Inscription, accompanied with Notes, and a Translation. By P. RAINIER, Esq.*

Invicti ⁽¹⁾ veneranda ducis ⁽¹⁾ per sæcula vellent
 Victrices Musæ Pallas crinitus Apollo
 Læta serenifico defundere carmina Gallo ⁽²⁾
 Intemerata malas hominum set ⁽³⁾ numina fra[udes]
 Jurgiaque arcanis et perfida pectora curis
 Fugêre Hadriani tamen ad pia sæcula verti
 Ausa per occultas remeant rimata ⁽⁴⁾ latebras
 Ut spirent cautes ⁽⁵⁾ ac tempora prisca salute[nt]
 Sacra Mamertino sonuerunt præside si[gna] ⁽⁶⁾
 Tum superûm manifesta Fides ⁽⁷⁾ stetit in civi[tate] ⁽⁸⁾
 Inachias ⁽⁹⁾ sospes ⁽¹⁰⁾ diti pede ⁽¹¹⁾ pressit haren[as]
 Namque in percelsi densata sedilia tem [pli] ⁽¹²⁾
 Incola quo plebes tectis et funditur a[ltis]
 Munera cœli[colis, or colûm].....

The portions of words in brackets are conjectural.

Observations.

(1) The *Invictus Dux* must have been some person who preceded ADRIAN; for the periods of the one and the other are evidently distinct; in one, the Muses, &c. fled; in the other, they returned. The epithet, *veneranda*, though applied to *sæcula*, seems, however, to imply that the person had the title of *Augustus*, which was interpreted by the Greeks Σεβαστος, i.e. *venerandus*. Why should it not be the AUGUSTUS, to whom that title was first given by the Senate? The term, *invictus dux*, is less applicable to ADRIAN, who, though he had served under TRAJAN, was not so much distinguished in his warlike character, as in that of a man of science; and whose love of peace, when emperor, even induced him to purchase it from some barbarous nations by the payment of money. The idea that AUGUSTUS was intended is strengthened by what follows respecting GALLUS.

(2) The person here spoken of seems to be CNEUS (or PUBLIUS, for he has been so called) CORNELIUS GALLUS, the first Prefect (*Præses*) of Egypt. ÆLIUS GALLUS, afterwards Prefect or *Procurator*, is known only as the

leader of an unsuccessful and disastrous expedition against the Arabians. Another ÆLIUS GALLUS is said to have held the same post after him in the reign of AUGUSTUS, but to have been confounded, even by the Latins, sometimes with AQUILIUS GALLUS, sometimes with CN. CORNELIUS GALLUS. Little is known of his history.

But CNEUS CORNELIUS GALLUS, the elegiac poet, a friend of VIRGIL, POLLIO, and other great men of that age, a native of *Forum Julium* (either *Friuli* in Italy or *Frejus*, probably the latter), greatly assisted OCTAVIUS in reducing Egypt to a Roman province, and distinguished himself by the defence of *Parætonium*, a city on the coast of Egypt, which had been taken by OCTAVIUS, against the attack of M. ANTONIUS. After the death of M. ANTONY and of CLEOPATRA, he was appointed Prefect of Egypt, as a reward for his services, and from motives of policy. His having taken this command at the close of the war, and by judicious measures established the peace of the country, may have occasioned the epithet *serenificus*. The circumstances mentioned respecting CN. CORNELIUS GALLUS, accord remarkably with what is said in the exordium of this inscription. The Muses, PALLAS, and APOLLO, wished to celebrate GALLUS, but were disgusted by the falsehoods, quarrels, and treachery of men, and fled. So it is said, that VIRGIL had celebrated him in his fourth Georgic, but that AUGUSTUS caused the lines to be omitted by the poet, who substituted the fable of ARISTÆUS and the bees. The P. DE LA RUE, and after him M. AMAR DURIVIER, appear to disbelieve this account, as shewing a degree of submission unworthy of VIRGIL; but it can hardly be supposed that he would refuse to comply with the command of such a patron. They contend, also, that it is not probable that AUGUSTUS would have suppressed these lines, while those about GALLUS, in the tenth Eclogue, were allowed to remain. Two good reasons may account for this: first, what is there said of GALLUS is not so much to his glory, proving only his weak fondness for LYCORIS, who is said by some to be the same with CYTHERIS, the freed slave of VOLUMNIUS, and who followed M. ANTONY; but who, if, as HEYNE thinks, she was not the same, at all events had deserted GALLUS, and attached herself so much to some other military man, as to have accompanied him through a snowy region and a severe campaign:

“*Perque nives alium perque horrida castra secuta est.*”—Virg. Ecl. 10. v. 23.

and, secondly, the Eclogue had been published more than ten years before the recall of GALLUS, and therefore could not be suppressed; whereas

AUGUSTUS probably objected to the lines in the Georgic when first written, and communicated to him before they were generally known.

However this may be, the account has been believed, and no doubt had gained credit in the time of ADRIAN.

Then we find the cause of the anger of AUGUSTUS, and of the recall and punishment of GALLUS, to have been an accusation preferred against him by his friend and colleague VALERIUS LARGUS, viz. that he had erected statues of himself throughout Egypt, inscribed his own actions on the Pyramids, and when under the influence of wine, abused AUGUSTUS. The last is particularly alluded to by OVID, who considered it as the chief cause of offence.

“ *Nec fuit opprobrio celebrasse Lycorida Gallo,*

“ *Sed linguam nimio non tenuisse mero.*”—Ov. trist. 2. 445.

Such a betraying of what passed probably in private, their disputes, and the falsehood of the accusation in the opinion of the writer, may account for the words *malæ fraudes, jurgia, and perfida pectora*. At all events, the coincidence is curious, as, I think, is that of the two last words in the third line of Virgil's tenth Eclogue, and those of the line of this inscription, which ends with

“ ———— *defundere Carmina GALLO,*”

that of the Eclogue ending :

“ ———— *neget quis Carmina GALLO ?*”*

The writer had probably the latter in his mind.

(3) *Set* for *sed* occurs in most instances in the palimpsest manuscript of *Cicero de Republicâ*, discovered by ANGELO MAIO in the Vatican library, as he informs us in a note at the end of his edition of that work, published in London 1823 : *aput, istut, it*, are also put for *apud, istud, id*. This, he thinks, was the ancient way of writing the words. The MS. of St. AUGUSTIN, written over the MS. of CICERO, was anterior to the tenth century, the latter doubtless much more ancient.

(4) *Rimata* is here used in a passive sense, as it was in the later times. It is probable that the statues (small bronzes perhaps) of the Roman deities, which had been brought to Egypt, had been removed in the time of

* Parodied by Milton, “ Who would not sing for Lycidas ?”

AUGUSTUS to conciliate the Egyptians, and concealed for security, and had again been sought for and restored in the time of ADRIAN.

(5) *Ut spirent cautes*. The word *cautes* here is, as I conceive, applied (and not improperly), to the immense blocks of stone which formed the Egyptian statues. The statue of MEMNON was said by many authors to have uttered a sound like the human voice, which would justify the word *spirent*. JUVENAL, it is true, (sat. xv. l. 5), speaks of the *magicæ chordæ*, implying that the sound was produced by the vibration of strings; yet, according to an old scholiast on that line, it was *vox humana*. TACITUS terms it *vocalem sonum*. DIONYSIUS PERIEG. uses the word *γερωνῶς*; EUSTATHIUS, *φωνῶν* and *προσλαλῶν*. The Greek and Latin inscriptions on the legs of the statue speak of the sound as vocal. An interesting collection of these, seventy-two in number, copied by Mr. SALT, and restored and explained by M. LETRONNE, a member of the French Institute, is inserted in vol. II. of the Transactions of the Royal Society of Literature. Many of these attest, that the sound was heard in the time of ADRIAN, and state by whom. One informs us, that this Emperor himself heard the statue, before the rising of the sun, saying to him, “*χαίρε*,” hail! This is decisive as to the pretended nature of the sound. The above view of the meaning is confirmed by the line following.

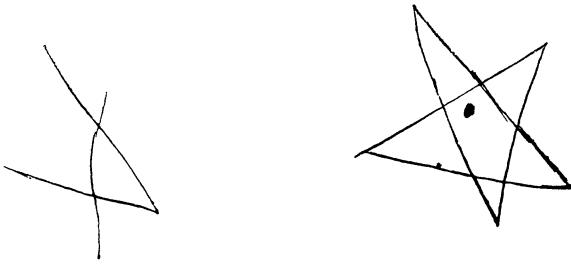
(6) *Signa* must be the word here. The third letter is almost perfect, and nearly the whole of either a C or a G.

(7) *Fides superum* appears here to signify the favour and protection of the gods. It seems to me to be personified; although this is rather a strong figure.

(8) *In civitate*. I cannot imagine any other way of completing the line, which is broken off at INCIVI, these letters being quite distinct. It is not a conclusive objection that the first syllable of *civitate* is made short; because it is certain that the ancient poets, and more so, no doubt, in the later times, used frequently the license of altering the usual length of syllables, not only (though principally) in proper names,* but also in other words.† In the fragment before us we have *Hadriāni* with the penultima short; unless the two vowels are to be pronounced as one long syllable, if that can well be done after *dr*. We have instances of this name measured in the same manner in

* De Bosch. ad Anthol. 4to. Ultraj. 1810. Vol. IV. p. 298.

† Ibid. p. 437.



INVICTIVENERANDADVCISPERSAECVLAVELLENT
 VICTRICES MUSAE PALLAS CRINITVS APOLLO
 LAETASERENIFICODEFVNDERECARMINA GALLO
 INTEMERATAMALASHOMINVM SETNVMINAFRO
 IVRGIAQVEARCANISETPERFIDAPECTORA CVRIS
 FVGEREHADRIANITAMENADPIA SAECVLAVERTI
 AVSAPEROCVLTASREMEANTRIMATALATEBRAS
 VTSPIRENTCAVTESACTEMPORAPRISCASALVTEI
 S SACRAMAMERTINOSONVERVNTPRAESIDESIC
 TVMSVPERVM MANIFESTAFIDESSTETITIN CIVIS
 INACHIASOSPESDITIPEDEPRESSITHARENA
 NAMQVEINPERCELSIDENSATASEDILIATEM
 INCOLAQVOPELBESTECTISETFVNDITVRAT
 MVINERA CAELI

Lithographed by J. Netherdelt for the Royal Asiatic Society

*Fac-simile of a Latin Acrostic, cut on a Stone, brought from the
Great Temple at Kalabshe in Nubia; - by Capt.ⁿ Rainier, R.N., C.B.*

some of the Greek inscriptions mentioned in note 5. Again, we find here the first syllable of *Mamertinus* short, which should be long, according to MARTIAL, l. 13. e. 117, if this name be derived, as probably it is, from the same place, as that of the wine mentioned in the epigram.

(9) *Inachias*. The word *Inachius* has been used in other cases in the sense of *Grecian*, but the Rev. H. DRURY very ingeniously understands it here as *Egyptian*, in the same way as ISACUS, ISIS or IO being the daughter of INACHUS. She is sometimes called INACHIS.

(10) *Sospes* may be applied to *Fides*, as meaning *auspicious*, or *unimpaired*, *undiminished*, or in the old sense of *preserving*, for *sospita*.

(11) *Diti pede* may mean that she brought with her riches and prosperity to the country—perhaps fertility to the sandy soil.

(12) *Densata sedilia templi*. No mention is found elsewhere, I believe, of the “*seats of the temple*.” We might obtain information respecting these, as well as on other interesting matters, should the lost part of this record be recovered. This, it is to be hoped, will be effected by a careful search among the ruins on the same spot.

The following may be taken as a literal translation of the lines :

“ In the august age of the unconquered leader, the victorious Muses, PALLAS, and APOLLO with the flowing hair, wished to pour forth joyful songs to the pacificator, GALLUS. But these pure deities fled from the wicked falsehoods of men, their quarrels, and their bosoms perfidious with secret cares (anxious with thoughts of secret perfidy).

“ In the pious age, of ADRIAN, however, daring to change their resolution, they return, having been sought out through the hidden places of concealment, that rocks may breathe and hail the ancient times (as returned).

“ In the prefecture of MAMERTINUS the sacred statues sounded. Then the protecting Favour of the gods stood manifest in the state, and auspicious pressed with an enriching foot the Egyptian sands. For on the crowded (closely placed) seats of the lofty temple, towards which, as well as on the high roofs, the plebeian inhabitants pour themselves, offerings to the gods (or gifts of the gods) —.”

The acrostic, as far as we have it, is “*Julii Faustini M.*” CICERO (*de Divin.*) remarks, that the Sybilline verses were acrostic, the initial letters of the lines forming a short title expressive of the subject. It was probably so here. I presume, therefore, that the third word, of which we have the *M.*, was *Mamertini*, something more following. He was perhaps the principal cha-

racter. The reason given at the beginning, why GALLUS, the first Prefect, had not been celebrated, *viz.* the absence of the deities presiding over the fine arts, ought, as the party had returned, to be followed by the celebration of MAMERTINUS, the existing Prefect. His name, therefore, should form a part of the acrostic.

P. R.

Albany, July 15, 1831.

II. *Account of an Avenue of Sphinxes, discovered by Capt. RAINIER, C.B., R.N., at Ben-i-Hassan, in January 1829.*

To the Secretary of the ROYAL ASIATIC SOCIETY, &c. &c.

2, Old Cavendish Street, April 13, 1831.

SIR :

At our last meeting, a visitor having casually alluded to the discovery by Captain P. RAINIER, of the Royal Navy, of an avenue of Sphinxes (or Sphinges) at *Ben-i-Hassan* in Egypt, which has not been noticed by any traveller hitherto, I have the pleasure to lay before the Society a letter from Captain RAINIER, giving a description of them, as well as of the excavated temples at *Ben-i-Hassan*.

I remain, Sir,

Your most obedient servant,

H. J. BOWLER.

Southampton, April 7, 1831.

MY DEAR BOWLER :

Agreeably to your wish, I will give you all the information I can relative to the avenue of Sphinxes I discovered in January 1829, at the excavated temples at *Ben-i-Hassan*, in latitude $27^{\circ} 53'$ N. (the first you arrive at in ascending the Nile from Cairo). These excavations are of the most beautiful proportions ; they bear the name of OSORTSEN the First, the most ancient king yet discovered, having his name in hieroglyphics (a more ancient prefix of a Pharaoh is constantly found ; but the oval *that should contain* the name is not inscribed). All the temples at this place have

tombs under them, the approach to which is by a shaft or an inclined plane of 45° ; this was no doubt for letting down the bodies: there are also several perpendicular openings, perhaps to give light. The two northernmost temples are beautifully sculptured and painted: these have on them the name of OSORTSEN the Second; also of AMONNEITH THOTHA the First and Second, and the annexed prefix.



Amongst the paintings wrestlers are described; also offerings to the deity: the leg of a spotted bull is the first thing presented, then birds, bread, and flowers of the lotus; rivers are also depicted, in which are fish, and the hippopotamus: these are beautifully finished, particularly the scales of the fish. CHAMPOLLION was three weeks copying the paintings in these temples, representing the mode of sowing, reaping, weaving, &c. On each side the door of the Northern temple is a tablet of hieroglyphics with dates, the two first lines on the right as you enter run thus (the name and prefix are those of OSORTSEN the First):



The roof is supported by, or rather six columns are left to support the roof, each cut to sixteen sides: they have been painted to represent red granite; the roof is cut into three arches, and is decorated with yellow stars on a blue ground. The avenue of Sphinges, which I discovered, runs from the second temple to the Nile; the heads are off, and the horizontal sections of the necks alone are visible: these I should not have seen had it not blown hard for several days previous to my arrival at *Ben-i-Hassan* from Thebes, which dispersed the sand. At Thebes I had measured the distances between the Sphinges, that line the great street of *Amonaph*, which connects *Luxor* with *Carnac*; they are nine feet apart: and on measuring the distance between the circular stones lying in two lines from this temple at *Ben-i-Hassan* to the Nile, I found it agree exactly, and after a little search,

I discovered the head of one of them (the ram) half buried in the sand: this was ample confirmation as to what they were. I regret not opening the sand in front of one of them, as I should have found the name of the king who caused them to be erected, but have no doubt that it was OSORTSEN the First. If this account is worth laying before the Royal Asiatic Society you are welcome to do so. I have given a slight description of the excavations at *Ben-i-Hassan*, for the benefit of those who have not seen or heard of them. * * * * * *

I am, your's faithfully,

P. RAINIER.

XIII. *The Ceremonial of the Ordination of a Burmese Priest of BUDD'HA, with Notes, communicated by GEORGE KNOX, Esq., of the Hon. East-India Company's Medical Establishment, Madras.*

Read 18th of June 1831.

To Sir GEORGE THOMAS STAUNTON, Bart., V.P.R.A.S., &c. &c. &c.

London, 26th April 1831.

SIR :

In the course of a conversation held not long ago at Canton with Professor NEUMANN, respecting the affinity between the Chinese and Burman languages, I happened to shew him a translation that I had, which he considered somewhat curious, and recommended me to present to the Royal Asiatic Society; and Doctor MORRISON offered me an introduction to the President, which, with the translation, I have now the honour to forward to you.

It is fair that I should, at the same time, submit a short criticism of the doctor's, which I found with the manuscript on its return from him; and to mention that I transcribed it anew, leaving out some redundancies of expression, and the too frequent mention of the sacred name, which, if nothing more, appeared irreverent. Respecting what the doctor remarks, I would say, that the work is the translation of a translation (for I know nothing of the Pali), and that as such it was delivered to me orally by a respectable native, whom I employed in the business: I profess, therefore, to be answerable only so far for its fidelity; but I have little or no doubt that the spirit at least of the original is preserved.

The doctor also takes, I suppose, his notions of Buddhism from the Chinese people alone; but having seen both, I can affirm, that the Burmans appear to be a much more religious people than the Chinese, at least externally, if one may judge from their regular visits to their temples, and the deep veneration with which they regard the priests and every thing belonging to their objects of worship. It is, however, possible that my assistant had caught something of the turn of expression in use amongst us on

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matters of religion, as he had associated a good deal with the American missionaries who visited the Burman country.

I have the honour to be, Sir,

Your most obedient servant,

G. KNOX.

The writing which treats of the ordination of a Priest.⁽¹⁾

The offering ⁽²⁾ of the just king [titles] ⁽³⁾, in whose hand are the lives (of his subjects), and at whose expense was constructed the pagoda of "Pacified Anger." ⁽⁴⁾

(This, like many other of the Burman writings, begins with the following prayer) :

" Oh LORD, filled with glory and power unspeakable, who art infinitely
 " more excellent than all creatures, whose words are by far more valuable
 " than the words of all other beings ; who art wise far beyond the wisdom
 " of man, and whom men nor angels ⁽⁵⁾ cannot equal ; who art not subject
 " to misery or trouble of mind, and to whom all secrets are laid open ; who
 " canst confer happiness on all beings, and knowledge on the ignorant :
 " therefore art thou called the LORD. What is now said is but a little ;
 " the whole life would not suffice to speak it all. THEE, therefore, do I
 " worship. The laws uttered by thee, are eighty and four thousand : these
 " also do I worship ; and I worship the people who abide by these com-
 " mandments.

" Therefore, on account of worshipping these three, keep me free from
 " the ninety-and-six diseases ⁽⁶⁾ that assail the body ; from the thirty-
 " and-two accidents and misfortunes that happen to man, and from
 " the twenty-and-five unlucky circumstances that befall him ; from the
 " sixteen sources of trouble ; from the ten crimes, and their corres-
 " ponding punishments ; from the eight calamitous conditions, ⁽⁷⁾ and from
 " the five enemies : ⁽⁸⁾ from all these deliver me ; and grant unto me gold, ⁽⁹⁾
 " silver, precious stones, sons and daughters, relations and friends, ser-

“ wants and slaves, guards and protectors : these grant me ; and grant me
 “ also a good reputation (or the quality of inspiring respect). Fill me
 “ with all these ; and after death let me reach that place, where I may
 “ hear the law of the Creator : thus, old I shall not become, nor sick, nor
 “ shall I die, but shall exist unto eternity.”

First, a teacher (or priest) of advanced age must be sought for ; and after he is found, the *thabike*,⁽¹⁰⁾ and *thanegan*,⁽¹¹⁾ and the rest of the eight things necessary must be obtained ; and these are the eight things : a *thabike*, *thanegan*, folded leather,⁽¹²⁾ a water-strainer, a fan, a razor, three needles, and a broom. After having procured these things, it is necessary to go to the presence of the teacher advanced in years, and thus address him : “ Oh, my Lord, admit me to the noviciate of the priesthood ; I will adhere to the ‘ Ten Ordinances.’ ” To which the teacher answers, “ Good, you may enter the noviciate : you must not take away life ; you must not steal ; you must lead a life of perfect celibacy ; you must not speak that which is untrue, nor make use of abusive words or coarse uncivil language, nor jests ; and you must not sow dissention among friends ; any thing of inebriating quality you must not use ; after the sun has gained the meridian, you must not eat ; you must not listen to music, nor look on at feasts or dancing ; you must not wear flowers or use perfumes ; you must not sleep on a high couch or soft bed ; you must not possess gold or silver, nor even touch them : that you transgress not these ten rules you must carefully watch.” Thus must the teacher direct ; and the novice must say, “ Good, my Lord, I am willing.”

Again, at the time he wishes to become a *rhahán*, he must prepare a large *thanegan*,⁽¹³⁾ and it must be four cubits broad, and six cubits and two *mike* ⁽¹⁴⁾ long, made of nine pieces, and sewn together with fifty-four double seams ; and after it is sewn it must be washed, and afterwards dyed with the wood ⁽¹⁵⁾ of the jack-tree, cut into small pieces and boiled in water ; afterwards the dyed *thanegan* must be wetted with the juice of the leaves of the *dowkyat*.⁽¹⁶⁾ After this a *thabike*, and the rest of the eight things necessary (like as was ordered for the noviciate, a fresh supply of these), must be procured and kept ready ; and the novice must then go to the presence of an aged teacher, well acquainted with the sacred writings, and along with him he must solicit the attendance of twenty other priests, and they must then go to the *thyne*.⁽¹⁷⁾

Having reached the *thyne*, the person about to be made a priest, must

make obeisance to the others, and the chief teacher then, and the three readers, say, "According to established usage, he must now be interrogated."

Questions now from the three readers⁽¹⁸⁾ to the candidate:—

Q. Have you sought for and obtained the attendance of priests of advanced age, and who fulfil the ordinances of the law, for the purpose of ordaining you?—A. I have.

Q. Have you procured a *thabike*, *thanegan*, and the rest of the articles necessary?—A. They are all in readiness.

Q. Are there twenty priests present?—A. There are.

(By the readers.) Such being the case, you must now put on the two portions of the priest's garment (the one that goes round the waist and the upper robe); and the remaining *thanegan* (the one for a change of dress), must be folded and kept on the left shoulder. Afterwards the *thabike* is to be suspended from the shoulder of the right side, under the arm of the left; and the rest of the "eight articles" must be put within the *thabike*. The candidate then, with lifted hands and joined (in attitude of supplication), must retreating go and stand at the distance of twelve cubits, and there, with his feet joined close together, he must attentively remain, and should not turn to either side.

After this is done, the chief teacher says to the three readers: "Two of you three rise and go over to the candidate, and interrogate him." This being said, two of the readers get up, and go to the place where the candidate is, and standing, one on each side of him, they (reading) say: "You must now answer truly."—A. I will do so.

(By them.) Every thing respecting your body, without disguise, you must declare; and according to the question answer, and from all other matters you must keep your mind clear.—A. Good, my Lord.

(By them.) Like as a cloth with which the feet are wiped at the door of a house, like as it is of little estimation, and like as it is applied to whatever use any one may choose, so must your mind be humble, and so must you receive the commands of your chief teacher.—A. Good, my Lord.

Q. Therefore, in your body,⁽¹⁹⁾ is there any leprous disease?—A. There is not.

Q. Is there any of that disease which appears by sores in the neck?—A. There is not.

Q. Are you a person of a sickly habit?—A. I am not.

Q. Are you subject to a constant cough?—A. I am not.

Q. Have you any impediment in your speech?—A. I have not.

Q. Are you truly a human being (a mere mortal man)?⁽²⁰⁾—A. I am.

Q. Are you perfect as to virility?—A. I am.

Q. Are you the offspring of human parents?—A. I am.

Q. Are you the follower of a chief,⁽²¹⁾ or in the employ of any one?—
A. I am not.

Q. Have you received the permission of your parents to enter the priesthood?—A. I have.

Q. Have you completed your twentieth year?—A. I have.

Q. Have you procured a *thabike*, *thanegan*, and the rest of the articles necessary?—A. I have.

The two readers then return to the chief teacher, and with the third of their number read as follows: “My Lords, we have now interrogated the candidate as was commanded us, demanding of him all that was necessary to be asked; therefore, that he may be ordained, will the chief teacher learned in the sacred writings and the other priests consent?” Then the chief teacher, for himself and the rest, says: “Good, very well.” The candidate still standing as before, the chief teacher says: “Let two *rhaháns* conduct him hither.” Two *rhaháns* then go and bring the candidate to the rest of the assemblage; and he having made a proper obeisance, sits down along with them.

The readers then instruct him to say to the chief teacher: “My Lord, may health, freedom from misfortune, eternal youth, and immortality be my portion. According to the law uttered by him who has no equal, according to it will I act. I will keep my body and my mind humble; and will humble myself regarding meat, drink, and resting place. I will conform to the law spoken by the divinity; therefore, from exceeding friendship, mercifully grant me permission, I beseech you, to be admitted a priest.”

This he is to speak three times; after which the chief teacher and the readers shall ask him: “Oh, candidate, who art wishing to become a priest, as even now you have entreated, do you feel yourself competent to abide by what is contained in the sacred writings?”—A. I will abide by them.

Then the chief teacher says to the rest of the priests: “What think you, will this person abide by the law, as he has now professed?” Then the priests answer: “There are other questions to be put to him.” The chief

teacher then says : “ Let the three readers put them.” They say to him : “ You profess that you will be governed by the rules of the everlasting law ; let us interrogate you again.”—*Answer*. Ask, and I will answer truly.

They then repeat the former questions, and in addition, ask : “ Are you hard of hearing ?”—*A*. I am not.

Q. Are you an absent (or forgetful) person ?—*A*. I am not.

Q. Are you perfect in the five bodily qualities ?⁽²²⁾—*A*. I am.

(He is questioned altogether three times, that there may be no omission or mistake.)

The candidate then petitions the chief teacher : “ Oh, my lord, who art well acquainted with the sacred writings, and who art of advanced age ; now have I for the third time reverently and according to the truth replied to you, in all that you have demanded of me ; therefore, oh my lord of venerable years, and ye three readers, and all ye other priests, ye are witnesses of all that has been asked me, and I have replied truly to the same ; therefore, from compassion to me, grant me permission to be admitted a priest.”

After this, the priests coming round the candidate, one of the three readers stands before him and the others at either side, and they read from this writing, their three voices forming as it were one : “ Oh venerable lord, learned in the sacred writings, and all ye other priests, this candidate, who is desirous of becoming a priest, having equipped himself with *thabike*, *thanegan*, and the other things required, begs permission to be admitted to the priesthood ; will you give your consent ?”

Then the chief teacher says, “ It is a very difficult matter to abide by the law ; and it is particularly the duty of priests to strive after it, for men who live in the world cannot do so, whether they be chiefs, or persons of unbounded wealth, or merchants, or cultivators : these cannot keep to the two hundred and twenty-seven rules, but *rhahdñs* must endeavour to keep them.”

After this the chief teacher and the other priests announce to him that he is admitted a priest, and admonish him thus : “ Take notice that from this day you are a priest, therefore greatly must you rejoice ; and according to this joy, see that you observe the two hundred and twenty-seven rules, and that they be not transgressed by you, and you may accept what (in a religious manner) is offered to you. If you do not govern yourself by these precepts, you are not a priest, but an ordinary man, and are not worthy

to receive the offerings that would be made to you ; for if unworthily such are received and turned to use, it is like a person attempting to swallow a lump of red-hot iron." The new priest answers, " Good, my lord."

" The man who enters into priest's orders must carefully note the day, the month, the hour, the length of his shadow,⁽²³⁾ and the season of the year at which he becomes a priest. Four things are there which must be avoided ; four, also, which should be done.

" To obtain food, he must go round and beg,⁽²⁴⁾ even till wearied in his limbs by so doing, and on food obtained in this manner must he all his life subsist. If a pupil reverently invite him, he may go and eat at that pupil's house, or he may carry thence food offered him. He may also eat the food which a pupil brings to his monastery and there reverently offers him : he may partake of the food presented to a number of priests in a body, and of that offered by lot. Thus, of whatever is offered on any day of the increase of the moon,⁽²⁵⁾ and whatever is offered on any day of its decrease, that which is offered on a worship day,⁽²⁶⁾ and that which is offered on the day after a worship-day, of all or any of these may he eat." The new priest answers, " Good, my lord."

" A garment made from rags that any one has thrown away, and which the priest having collected has washed and sewn together, this may he wear and with such must he be clothed even till the end of his life. But if by a pupil a garment be presented to him, he may wear such, whether it be of that expensive and fine kind which is brought from a distant country, or whether it be of cotton, or of silk, or of woollen cloth, or the woven bark of a tree, or that made from the down of birds ; any of these he may wear instead." *Answer.* " Good, my lord."

" After having become a priest, if he has no monastery to stay in, he must live under a tree,⁽²⁷⁾ and in that manner must he be all his life. Unless a pupil make an enclosure, and build a monastery, and offer it ; in this a priest may reside, whether it have a lofty top or a square one, or one of only one story, or be a monastery built of masonry in an arched form : in any of these it is lawful for a priest to reside." *Answer.* " Good, my lord."

" I will direct you what is to be done in case of sickness. Having collected the urine of a black bull or ox, boil it, and dissolve salt therein, and afterwards add these three fruits ;⁽²⁸⁾ this, while fresh, may be kept as medicine ; also, any medicine which has been thrown away as useless by others, and which a priest finds, he may take for himself. The medicine

also which a pupil offers, that may be used, whether it be butter, or cream, or sesamé oil, or honey, or molasses: all these may be used.”—*Answer*. “Good, my lord.”

“After a man has become a priest, he may not marry; but must lead a life of strict celibacy; if he do not conform to this, he is no longer a priest, nor of the children of the deity. As soon may the severed head be rejoined to the trunk, and the corpse revive, as such a one continue a priest; and even until the end of life must he so remain: thus hath the divinity appointed.”—*Answer*. “Good, my lord.”

“After becoming a priest, he must not take, without the owner’s leave, even a morsel of grass, or the paring of a bamboo, for if he do so he is not of the children of the divinity. He must not take the value of a *matt* (a quarter *kyat* or *tical*), or over this, or under it; as soon may the withered leaf be rejoined to the tree and thrive again, as such a person remain in the priesthood.

“The idea of taking away the life of a man must not enter into the mind of a priest; neither must he take away that of brute animals, nor even of a worm: he who does so is not the child of the deity. As soon might a broken stone be joined together and become whole again, as such a person continue a priest; and even till the end of his life this must be his rule: the deity hath so directed.”—*Answer*. “Good, my lord.”

“After becoming a priest, the thing that is untrue must not be spoken, nor any of the ‘ten precepts’⁽²⁹⁾ infringed. It must not be said, ‘I can fly in the air,’ or ‘penetrate the earth,’ or ‘go under the water,’ or ‘I shall certainly attain happiness in the next life,’ ‘the evils of this life cannot hurt me,’ or ‘I can render myself invisible.’ Like as a palmyra-tree of which the top has been cut off ceases to throw forth leaves, so he that says things of this sort cannot continue a priest. Thus hath the deity ordered.”
Answer. “Good, my lord.”

“There are four similitudes, and you must keep them in remembrance.”—*Answer*. “Good, my lord; so long as I wear the garment of a priest I will abide by these precepts, in hope that, by keeping them, I shall in death exchange this life for a better, and knowing also that if I do not I shall be turned into hell.”

These are the rules respecting the *kattine thanegan*. From the eighth day of the increase of the moon *Tazownmown* (about November), until the fifteenth day of the same, is the proper time for those who wish to buy and

offer garments to priests to do so. Cloth for two upper garments and one under garment, needles, thread, jack-tree wood, *dowkyat* : these articles are to be purchased, and taken whilst it is yet night to the neighbourhood of the monastery where dwells the priest,* learned in the sacred writings.

These things are to be put down at the steps ; and in order to bring it to the knowledge of the priest that they are there, the man who offers them is to throw some pebbles against the house from some place of concealment hard by. Then the priest, being aroused, will get up, and on coming down the steps will perceive the cloth and other things ; he must then three times enquire, saying, “ Is there any owner for these things ? ” and no owner being found, he may then take and put them aside for his own use. After this, the man who has been abiding in concealment is to go up into the monastery, and petitioning the priest, say, “ My lord, is there any owner for the things you took up just now ? ” The priest answers, “ There is not.” The other then says, “ As that is the case, I will make up the garment for you, if you please to let me have it. The *rhahán* then gives it to him, and he takes it to his house, and calls a person who understands how to make up these garments, gives him food, superintends the work, and sees that it is properly done. When they are made up, he washes, dyes, and hangs them in the shade to dry ; he then buys a *thabike*, and the rest of the eight things necessary, and solicits the attendance of several priests—if in a large town twenty, if in a small jungle-village nine. Then on the full of the moon *Tazownmown* he is to take the “ eight articles ” to the *thyne*, and there give food to all the priests. Before going to the *thyne*, the priest to whom these eight articles are to be offered is to instruct the man who offers them in all that is necessary to be done, and is to inquire if all is right and according to the sacred writings. At the *thyne*, the priest thus addresses the others : “ My lords, I beg you to attend to what I am going to say. These things are brought here to be offered to me, so, in presence of this company, I will put on these clothes, and by so doing bind myself to observe the rules laid down in the sacred writings (for the wearing of such) ; I beg you therefore to take notice.” Then two of the company read from this writing, and ask, “ The man that offers these things, and has called all these priests together, to him and to the priest who receives them, and keeps the ordinances in such cases required, to both of these persons what

* To whom it is intended to offer them.

advantage will arise?" Then they answer, and say : " The advantage promised in the sacred writings."⁽³⁰⁾ " Therefore let the priest put on the clothes, and let him not put them off nor change them, from the full of the moon *Tazownmown* to the full of the moon *Tabown* (four months), and let him not be ashamed of so doing, and let him eat but once a day, and let him reside in a place where there is nothing to attract the eye or ear, and let him reflect on the thirty-two elements of which his body is composed (blood, bones, flesh, &c.), then at night let him repair to a burying-ground, apart from where men pass to and fro, and there let him reflect on the forty circumstances of mortal dissolution (*i.e.* he is to reflect on the difference between man in his strength and comeliness, and man deceased and resolving into his component elements); and before daylight again, let him take his *thabike* and proceed to collect food from house to house, standing before the door of each (*i.e.* take the food, if offered; if not offered, he must remain fasting); then let him go to a secluded spot and eat, reflecting on the hundred and eighteen qualities of the body (as to what agrees with and is suitable for it, and the reverse)."

After this he puts on the garment, and makes obeisance to the other priests.

He who does this is not to eat with the rest, but to keep himself secluded.

NOTES.

(1) This is a writing in the Pali language and character, and relates to the instalment of persons into the priesthood, their probationary course for it, and prescribed line of conduct after admission. To get at its meaning it was necessary for the original to undergo several transformations; first, from the pure Pali into a mixture of Pali and Burman, then into pure Burman,* and from that it was taken down verbally in a sort of English, resembling Burman in its inverted structure, before being brought into its present form.

The leaves of books of this kind are mostly made from the leaves of a large species of palmyra; but these being seldom broad enough, are artfully joined in the middle lengthwise, sewn together with silk, and lackered over. On the lackered surface the writing

* Which was done by a learned native.

is made, and the gilding laid on, the leaf is afterwards rubbed with a wet cloth; and on account of there being a mixture of yellow orpiment in the ink, the gilding does not adhere closely to the whole surface, but readily parts from the writing and lets it appear. It does not seem as if the leaves of this book * were made from two pieces joined; it is more probable that, as it was to be a royal offering, leaves of the largest size were sought for to make it up from. A tree that bears such is "one of a thousand;" and the people have a saying, that for every one of this kind that is found a man learned in the sacred writings also appears. These trees, also, are royalties.

(2) This writing was offered by SANE-PYOO-SHANE, the third of the *Alown Purra* (*Alomptra*) dynasty, and second son of its founder. The dedication appears, both at the beginning and end of the book, in handsome gilt characters. This king ascended the throne in the year 1134 of the era of GAUDAMA, and died in 1138; the present year, A.D. 1827, is 1188 of that era: the book must therefore be at least fifty years old.

(3) The title consists of fifteen syllables, or rather Pali words. This is one of the longest that a king can have; the heir apparent may have twelve or thirteen: but it does not entirely depend on the will of the party how many syllables he may have, but on the number out of the "ten virtues" that he possesses. This king, with the title of fifteen syllables, took more it is said than he deserved, and therefore his reign was but short. Some king, a long while ago, in Ceylon, took a title of twenty-one words at the time he had reigned seven years; but after this act of presumption he lived to enjoy his honours only seven days. It is not lawful to translate the title of the king. The number of words in a title forms a gradation of rank. Persons may not assume place with those who have longer titles than themselves: if they do, the party intruded on may cut (with his knife, the *sitting part* of) the intruder.

(4) This is the translation of the name of a pagoda of large size in the city of *Ava*. The occasion of its construction was as follows:—Upon ascending the throne, the king gave to his four younger brothers employment in the government, and built palaces for them near his own, at the four cardinal points. The three younger of these brothers conspired against their eldest brother and sovereign to put him to death; their excuse for which was, that he had constituted his own son heir-apparent in contravention of the dying commands of *ALOMPRA*, who had directed that *his* sons should succeed to the throne, according to their seniority; asserting, moreover, that SANE-PYOO-SHANE was not entitled to reign, having been born whilst their father was yet a man of low estate; but that they were the lawful heirs, being the sons of the *king*. The remaining brother, *MOWN-WINE* (grandfather of the present king), having also been born before their father became a king, was not admitted to the conspiracy. The conspiracy failed, and their lives were of course forfeited; but the king spared them, and built the pagoda in question to commemorate the circumstance: two of them, however, were afterwards put

* The book in question belonged to Mr. HEWARD, of Madras, and was intended for Sir C. GREY. Great numbers having been found in the monasteries during the Burman war, it is probable that many were taken to England. Some were made of large plates of ivory.

to death, and the third banished to a distance, by MOWN-WINE. The accessions from ALOMPRA to the present king have been as follows :

First. ALOMPRA, in the year of GAUDAMA	1116
Second. His son, NOWN-DAW-GHEE	1123
Third. SANE-PYOO-SHANE, brother of the last.....	1134
Fourth. SANE-GOO-ZA, son of the last	1140
Fifth. GUAMOWN, son of the second, reigned but seven days...	1143
Sixth. ALOMPRA'S SON, MOWN-WINE	1143
Seventh. The present king, grandson of the last.....	1181

(5) Or rather *Nats*, imaginary beings, good and bad : the good inhabit certain stages of the sacred mountain "*Myeen-Moe*," or the "highest;" the bad live in jungles and hills on earth, and trouble mankind. Very good men, after death, may become *Nats*. The day of a *Nat* is equal to a hundred years of the days of man, and their lives consist of a thousand years of these days ; they then vanish into nothing, as from nothing they arose.

(6) Such is the number of the diseases their writings say the body is subject to.

(7) First, the place where a woman rules ; second, that where only brute animals exist ; third, where a minor is king, &c. &c. Hell.

(8) Rulers, thieves, fire, water, people who hate one.

(9) The speaker prays for that which as an ordinary man he would wish for in a future state of existence. As a priest, he must not even touch gold or silver, and should not possess any secular property.

(10) *Thabiike* is the name of the black earthen pot which the priests suspend in front of them when they go their rounds to collect food. It should be five spans in circumference.

(11) *Thanegan* is the name of the robe, or upper garment, which the priests wear. The people look with the greatest reverence on it, and with corresponding horror on its being applied to any common purpose, as was often shewn during the late war by their remarks when any of our troops or followers were seen in possession of one.*

Although youths of all ages appear clothed in it, they are not yet priests, nor can they be till the age of twenty-one. Up to this period they are merely probationers, and employ themselves in reading the sacred writings, attending on the elder priests, and studying the "ten rules," viz. First, not to take away life ; second, not to take furtively the smallest thing ; third, to lead a life of celibacy ; fourth, not to speak untruths ; fifth, not to partake of any thing of inebriating quality ; sixth, not to eat after noon ; seventh, not to dance ; eighth, not to wear any scented or other flowers, not to use any perfume or look in a glass, and not to look on at feasts and dancing, or listen to music ; ninth, not to sleep on any bedstead of more than a cubit high, nor on a soft bed, but on a mat or carpet ; tenth, not to touch even gold, silver, or precious stones. If a novice

* The Chinese priests sometimes use a similar sort of garment.

offend against any of the first five of these, he cannot remain as a student, but must put off the priest's garment, and as the phrase is, "become a man again," until by penance he has amended. Offence against the other five may be forgiven, upon merely performing certain acts of penance enjoined by the superior, as sweeping the floor, drawing water, &c. &c.

(12) To sit on.

(13) Which must be made of double cloth. That worn by the novice is single.

(14) A *mike* is a measure of length, the distance between the point of the thumb and the outside of the clenched hand.

(15) Which produces a brilliant yellow.

(16) These leaves are somewhat acid, and seem used to fix the colour.

(17) "*Thyne*" is the name of a house built for worship in a secluded place. One description of *thyne* is built on ground the entire property of which has been purchased from the sovereign for that particular purpose, by some one wishing to perform a work of merit in making an offering of the same. The mere price may be great, or the sum expended may be large, from the necessity of giving large bribes to the courtiers to procure the royal permission. A *thyne* near *Shwaydown*, known to the Burman who translates this, built by one of the king's steersmen, cost perhaps ten thousand ticals.

(18) Three of the company set apart for the purpose.

(19) See Levit. c. xxi. v. 17, *et seq.*

(20) This question is put, because they have an idea that in former times certain malignant beings of superior power occasionally assumed the human form, and having obtained admission to the priesthood, did afterwards grievously offend against its canons, and thereby draw down much scandal on the order.

(21) This is asked, because people of this class are said to be oppressive to the poor, forgetful of their parents, haughty, and fomenters of trouble.

(22) Use of eyes, ears, nose, arms and legs, and trunk.

(23) Taken by measuring the length of it with his footsteps.

(24) Or rather receive it when offered. A priest may not ask for food, but should stand mutely before a door for a time, and take it if given.

(25) Because each person chooses what day he likes to make his religious offering on.

(26) There are four worship days: the eighth day of the increase, the full, the eighth day of the decrease, and the disappearing of the moon.

(27) He may not construct a residence for himself.

(28) Two of these are, the *terminalia chebula* of Willdenow, and the *phyllanthus emblica* of Linnæus. The name of the other is uncertain.

(29) The "ten precepts" are as follow: first, to make religious offerings; second, to refrain from taking away life, from stealing, lying, and committing adultery, and from the use of whatever inebriates; third, to repeat portions of the law (divine); fourth, to assist one's parents or teacher if they fall into difficulties; fifth, to rejoice on account of one's good works; sixth, to invite friends to do the same; seventh, to

abide by the law; eighth, to listen to the preaching of the same; ninth, to desire to continue in the straight road (to virtue); tenth, divinity, law, the ministers of religion, and things belonging to it; one's parents, teacher, old people, and people of wealth and respectability: all these are to be honoured.

(30) In the next life, the *rahán* in question may rise to a higher grade of being, and return to the same for ten thousand returns of life; and should he become a man, he will have every thing that is good, and be provided for as if he had a tree which produces all the necessities of life at the wish. The man who offers the thing to the priest will have his corresponding good fortune also.

It seems strange that there is not throughout the book any mention made of a certain fancy entertained amongst the Burmans, and looked upon by some as the thing most to be desired, *viz.* *Nirvan*, or annihilation.

Observation by the Rev. Dr. MORRISON, referred to in Mr. KNOX's Letter, p. 271.

On Note 1.—The translation is too much Anglicized to be satisfactory as to its fidelity. Buddhists speak not of a “Creator of the universe,” or the “children of God.” The translation is not only Anglicized, but also Christianized.

There is much that is very interesting in this MS.

R. M.

Canton, Nov. 12, 1830.

XIV.—*Some Account of Charms, Talismans, and Felicitous Appendages worn about the person, or hung up in houses, &c. used by the Chinese.** By JOHN ROBERT MORRISON, Esq., Cor. M.R.A.S.

Read 2d July 1831.

Charms may be divided into three kinds :

- I. A kind of talisman, worn generally about the person, but sometimes also hung up on the walls of houses.
- II. Little sacred books, which are suspended from the girdle in small silk bags, and hence called *Pei-king*, “Girdle-scriptures.”
- III. Spells, called *Foo-chow*.

I. *Talismans*.—Under this head are arranged some charms which are not properly speaking talismans, but for which no other generic name could be found.

1. *Tsëen-këen*, “Money-swords.” These consist of a number of old copper coins called *cash*, strung together in the form of a sword, and kept straight by a piece of iron running up the middle. They are hung at the heads of beds, that the supposed presence of the monarchs under whose reigns the *cash* were coined may have the effect of keeping away ghosts and evil spirits. They are used chiefly in houses or rooms where persons have committed suicide or suffered a violent death. Sick persons use them, also, in order to hasten their recovery.

2. *Pih kea so*, “The hundred family-lock.” To obtain this a man goes round among his friends, and having obtained from one hundred different persons three or four of the copper coins called *cash*, each, he himself adds whatever money is requisite, and has a lock made, which he hangs on his child’s neck, for the purpose of locking him, as it were, to life, and making the one hundred persons sureties for his attaining old age.

* A series of specimens of the articles described in this paper was presented by Mr. Morrison to the Royal Asiatic Society at the same time with this paper, and is now arranged in the Museum of the Society.

3. *King keuen so*, "Neck-ring lock." This is worn by grown females as well as by children, for the same purpose as the preceding.

4. A charm on which are these inscriptions: *San to kew joo*, "the three *manys* and the nine *likes*;" and *E keae meí show*, "to obtain long-eyebrowed longevity." The three *manys* are: *To fuh*, to *show*, to *nan tsze*, many (years of) happiness, many (years of) long life, and many sons. The nine *likes* are expressed in the two following stanzas of a song in the *She king*, in which a minister who has in the six preceding songs been receiving the praises of his sovereign, answers by numerous wishes on his behalf.

1.	2.
Teën paou ting urh,	Joo yuě che hǎng,—
E mǒ puh hing,	Joo jih che shing,—
Joo shan,—joo fow,—	Joo nan shan che show,—
Joo kang,—joo ling,—	Puh keën puh pǎng,—
Joo chuen che fang che ;	Joo sung pih che mow ;
E mǒ puh tsǎng.	Woo puh urh hwǒ ching.

Heaven preserve and establish thee,
That in all things thou mayest prosper,—
Mayest be like the hills,—like the high hills,—
Like the mountain tops,—like the lofty mountains,
Like the straight-forward path of the sea,
That there may be nothing wanting to thee.

* * * * *
Like the moon, constantly revolving,—
Like the sun, ascending upwards,—
In longevity, like the Southern hills,
Which never fail nor fall,—
Like the luxuriant foliage of the fir.
Each of these things mayest thou successively receive.

5. *Koo-tung king*, "The old brass mirror," is a charm which is supposed to possess the virtue of immediately healing any who have become mad by the sight of a spirit or demon, by their merely taking a glance at themselves in it. By the rich it is kept in their chief apartments, for the purpose of keeping away spirits.

6. *Pei tsang han yuh*, "The jointly interred *yuh* stone of *Han*." It is said that, under the *Han* dynasty, when a rich person died, each of his friends dropped a *yuh* stone into his coffin. Should any one obtain one of these stones it will preserve him from evil spirits and from fire.

7. *Chang poo*, *Gae*, *keën*, "Sword of *Chang poo* (*Acorus Calamus*), and

Gae plants.” On the fifth day of the fifth moon, sprigs of each of these plants are stuck up at the doors of houses, in order to deter all manner of evils from entering. Hence the following couplet is sometimes written on the door-posts of houses :

Gae ke chaou pih fuh,
Poo keën chan tsëen tsae.

The *Gae* banner calls forth a hundred blessings ;
The *Poo* sword destroys a thousand evils.

8. *Taou foo*, the “ Peach charm,” consists of a sprig of peach blossoms, which, on the first day of the first moon, is placed in some districts at the head of the door of every house, to drive away demons and malignant spirits. This gives rise to the following couplet :

Le yew jin ho seu mǔh tǒ ;
Sze woo seay yen yung *taou foo*.

If the village possess virtue, what need is there for the wooden-tongued bell ?*
If the thoughts be free from impurity, of what use is the *peach-charm* ?

9. *Ke lin*. The fabulous animal which is said to have appeared at the birth of CONFUCIUS. Hence worn by children for good fortune.

10. *Pǎ kwa*. The eight diagrams, cut on stone or metal, are often worn as charms.

11. *Show taou*, “ Longevity Peach.” A charm for long life.

12. *Hoo-loo*, “ The Gourd.” Gourd-bottles being formerly carried by old men on their backs, figures of them, made either of copper or of the wood of old men’s coffins, are worn as charms for longevity ; the former round the neck, the latter round the wrist.

13. *Hoo-chaou*, “ Tiger’s-claw.” This is a charm against sudden fright.

14. *Yǔh yin*, “ *Yǔh*-seal.” This is a stone worn by children on their foreheads or wrists, on which are cut short sentences, such as *Fǔh joo tung hae*, happiness like the Eastern sea (in extent and continuance). It is supposed to suppress fright, and to show whether a child is well or ill, by a clear appearance in the one case and a dark appearance in the other.

15. A seal of the *Taou* sect, worn as a charm, as well as for stamping spells.

* That is, instruction in virtue. The wooden-tongued bell was used by heralds in ancient times to call the multitude together to listen to their messages and instructions from their prince.

16. A charm bearing the eight diagrams, the Chinese signs of the zodiac, spells, and words expressive of its use, *viz.* to suppress and destroy evil spirits.

17. A charm of the *Taou* sect, consisting of a small knife, sword, and triangle. It is worn chiefly by females about the person, in order to avert the ill will of evil spirits and rustic demons. There are seals for similar purposes.

18. There are a variety of charms, of various kinds, for which there are no names and no peculiar uses; but they are considered felicitous, and are therefore worn by the poorer classes, who cannot buy the more valuable charms.

II. Little sacred books, called *Pei king*. From the specimen sent, these seem to contain only the pronunciation of Indian words, and they appear to belong only to the Bud'h sect. People of property buy them for their children, and pay priests to repeat the prayers, &c. contained in them, in order to preserve their children from premature death. The specimen sent is called *Ta pei chow*, "a prayer to the greatly compassionate one."

III. *Spells*.—These are formed by a fanciful union of several characters, to which astrology is sometimes added; and in those of the Bud'h sect Sanscrit or (which they appear more to resemble) Thibetian words. The book which accompanies the specimens is on the subject of spells, and in the first volume it contains a few of these foreign words. These spells are sometimes kept about the person, and sometimes pasted on walls or over doors. Some, also, are used as cures for sick persons, by being either written on leaves and then transferred into some liquid, or by being written on paper, burnt, and thrown into the liquid, after which the patient has to drink off the liquid and the spell together.

There are spells for almost every deity. Among the most common are:

1. *Yin-foo*, "Sealed-spells." These are of the *Taou* sect, written on yellow paper with red ink, and then stamped with a seal kept in the temples before the idols.

2. *San këö foo*, "Triangular spell." This is a paper with a spell written on it, and folded up in a triangular shape. It is fastened to the dress of children, to preserve them from evil spirits and from sickness.

Besides these there are many others of various kinds, such as different forms of the characters *fu*, prosperity or happiness; and *shou*, longevity. Among these is one called *Pih shou too*, "the map of a hundred *shous*," being a hundred different forms of that character: of course many of the forms are very fanciful.

There are also numerous figures of deified men, &c. which, though not properly speaking charms, are considered felicitous, and therefore hung up in houses and honoured, some constantly, others on particular occasions. Of the specimens sent, the following is an explanation:

1. *Kwei-sing*. The spirit of the North Polar star, the patron of learning. It is drawn standing alone on the head of the *Gaou*, a large fish, and kicking *Tow*, the Ursa Major, to represent the power of knowledge. The pencil in its right hand is held up on high, to signify the dignity of literature. There is a print from an engraving on stone, in which the eight characters *Ching sin, sew shin, kih he, fu le*, are written in a fanciful manner, so as to resemble the figure of the *Kwei-sing*. The seal characters at the top are the same as those of which the figure is formed.

2. *Chang-seën*. This is a deified man, who having shot the heavenly dog, which often devoured children, is worshipped by parents for the purpose of keeping their children from harm. In the drawing he is represented shooting the dog, with his children around him.

3. A representation of *Pwan koo*, the first human being; at least so marked by the seller: but it is more probably intended for *Füh he*, the inventor of the eight diagrams.

4. *Chang-teën-sze*, the imperial astronomer. The first who filled this office was *Chang-leang*, and his descendants are said to have succeeded him uninterruptedly. They are divided into two families, named *Kung* and *Chang*, who always intermarry; thus forming, from the union of *Kung* and *Chang*, the surname *Chang*. These deified astronomers are supposed to inform their worshippers when any great calamities, such as plague, famine, pestilence, &c. are about to take place. The introduction of European astronomers is said to have put the *Chang* family out of office, though the emperors still grant them sustenance.

5. *Ho, hŏ, urh seën*. The two genii, harmony and union. These are two partners in trade, who were always successful, and are therefore deified and worshipped by tradespeople. The two red animals represented flying

above them are intended for bats, which are considered the precursors of happiness and prosperity.

6. *Füh, lüh, and show*. Happiness, emolument or office, and longevity, with longevity's children.

7. *Heuen tan*. A man of great strength, who lived among the hills until invited by the tyrant CHOW to his assistance. On his way towards CHOW he met a tiger, which he bestrode and made it answer him as a horse. The object in worshipping him is to free houses of evil spirits.

8. *Chung-kwei*, the destroyer of demons. This was a strong and violent tempered man, who was deified on account of his antipathy to demons. He is sometimes represented trampling a demon under his feet; at others, introducing happiness under the symbol of a bat.

9. *Ke-lin sung tsze*, the *Ke-lin* presenting a child. This animal is said to have appeared just before the birth of CONFUCIUS, and is therefore worshipped by those who wish to have talented children.

10. *Yin yuen sae*. This is by one person said to be a god of lightning; by another he is said to be the son of the tyrant CHOW, who having received his education from a supernatural being, was able to exercise, with murderous effect, the magical skill thereby acquired, when he was called on to defend his father. Hence he is represented moving on the wheels of the wind and the fire, wearing a string of skulls round his neck, and holding a spear and a death-bell in his hands.

11. *Tsze-wei*. A spirit who, by restraining the voracious animal *Pe-hew*, prevents it from doing mischief, particularly from devouring the sun and moon.

12. *Tsae-pih-sing-keun*, the god of wealth. Before him are vessels of gold and silver ore.

XV.—*Remarks on the Siamese Language, by the Rev. Mr. GUTSLAFF. Communicated through the late ROBERT FULLERTON, Esq., Governor of Prince of Wales' Island.*

Read 16th July 1831.

LA LOUBÈRE, KÆMPFER, FINLAYSON, CRAWFURD, and Major BURNEY have all treated upon a language, either casually or specifically, which is spoken from *Quedah*, on the western coast of the Malayan Peninsula, to the country of *Laos*; and is surrounded by its sister languages, those of *Camboja*, *Pegu*, *Ava*, and *Laos*. The Siamese language is one of the principal dialects of the Indo-Chinese nations, and is the next link in the chain which the Cochin-Chinese language forms between the Chinese and the Indo-Chinese languages. It bears a strong resemblance to that of *Laos*, has derived much from the *Cambojian*, but differs remarkably from the *Peguan* and *Burmese*.

The acquirement of the colloquial dialect of the Siamese language is difficult for an European ear; and the study of books has been prevented by the want of elementary works, the scarcity of manuscripts, the jealousy of the government towards every intruding stranger, and the insignificance of the language itself. To Captain Low belongs the honour of having printed the first treatise upon it: his work, though imperfect, will, as being the first attempt of the kind, merit the praise of the scholar, and excite the student to further researches.

The Roman Catholic missionaries have translated several parts of the Bible, the lives of saints, and the mass-book, into Siamese: they have also written some tracts upon religious subjects. The latter only have been printed in the Roman character; the former still exist in manuscript in the same character. These translations are too literal, and not sufficiently idiomatical, which, in a language so different from the Latin (from which the translations are made) is very natural. It may be asserted, without hesitation, that the Siamese language sprang from the same source as the Chinese, but it is difficult to trace its origin. A few obvious coincidences

of single words, similar constructions and expressions, may imply a common parent, but do not warrant it. An accurate observation of the Chinese and Siamese languages shews, that the common appellations for such of the necessities of life as are needed in the first stages of society, are identically the same. It is so too with the names of objects presented to the first view of the child of nature.

The civilization of Tonquin and Cochin-China by Chinese conquest and colonization, is an historical fact, and so far certain; but a narration to the same effect with regard to Siam, is not so much to be relied on. It is said, that in ancient times JIH TSZE (son of the sun), a royal prince, having rebelled against his father, was banished, and settled with a considerable colony at *Cuy* in Cambojia, and afterwards in Siam, where he founded the capital, *Jut'hia*. Though he was a mighty prince, he considered himself a vassal of China, and frequently sent embassies to the Imperial court. As lord spiritual and temporal, he enacted a code of laws, which is said to have been preserved in the temple of *Sisaput*, at *Jut'hia*, until the invasion by the Burmese in the middle of the last century. If this is a fact, the origin of the language may be easily traced.

The Siamese era, which commences from the appearance of SAMUT T'HAKUDUM (BUDD'HA) in Siam and the adjacent countries, B.C. 340, makes it evident that the civilization of the country before this period must have been at a very low ebb. The introduction of every useful art is ascribed to SAMUT T'HAKUDUM, the enumeration of which evinces the savage state in which the inhabitants of Siam were found. Almost at the same time that the Son of God descended upon earth, CHAOU MAHARAT, a great legislator in Cambojia, established more firmly the rules of SAMUT T'HAKUDUM, and added some of his own. About A.D. 650, PAYA KRET, a Siamese legislator, perfected the work of CHAOU MAHARAT, by which all the neighbouring nations had been benefited, and Siam among the rest.

During this period, the Siamese language must have become more fixed by the introduction of an alphabet, which, being exactly suited to their organs of speech, greatly contributed to its perfection. While the Cochin-Chinese and Tonquinese languages have remained in close affinity to the Chinese by adopting the same characters, the Siamese has widely deviated, by the introduction of an alphabet. The Siamese have gradually changed from the monosyllabic system, by the introduction of words from the *Pali* language (which was introduced as the sacred language by SAMUT T'HA-

KUDUM, and even blending and forming their own words according to this model.

The kingdom of Cambojia being ruled by wise princes, who cherished learning and encouraged authors, it very soon became the model from which the petty neighbouring princes copied. From the time of CHAOU MAHARAT, the Cambojian legislator, not only the laws and customs of Cambojia, but also their literature, became objects of imitation to the Siamese. Since that time many Cambojian words have been adopted into the Siamese language, instead of equivalent Siamese words which previously existed : but while the Siamese honoured the language of foreigners, by using it as a medium of communication at court, they debased their own by making it exclusively the language of the common people.

The conquest of Siam, by different neighbouring nations, seems to have influenced the language very little. It is even rather more probable that the conquered, filled with hatred against their oppressors, refused to adopt a common medium of communication familiar to their enemies, and kept tenaciously to their own language.

Religion operates very strongly upon the modification of a language. When, at the close of the seventeenth century, the king of Golconda sent a copy of the *Korán* beautifully written, to the King of Siam, and by his emissaries refuted the arguments of the Siamese priests in presence of the king, there was a great probability that the *Palí* language would have lost its ascendancy over the Siamese. CONSTANTINE PHAULCON, then a man of great importance in Siam, dispelled this cloud, by disputing with the Mahomedan priests, and by shewing that their arguments were as fallacious as those of their antagonists; but at the same time he insinuated the religion of which he was a votary, viz. the Roman Catholic. When by his endeavours several very able Roman Catholic missionaries, under the protection of a fresh embassy, appeared, and shewed their superiority, the palm of victory for the *Palí* was again contested; but the Latin, which would have been substituted in the place of the *Palí* if the Roman Catholic religion had prevailed, was never permitted to assume the garb of a sacred language.

Intercourse with strangers has not tended to influence the Siamese language. The language of the Portuguese, who settled there at so early a period, and left traces of their visits there, as everywhere else, has been maintained amongst a small number of their own descendants alone. The

residence of other Europeans in Siam has only been temporary. When, in the middle of the seventeenth century, a colony of *Búgis*, under DAIN MANGALI, settled in Siam, and spread themselves to a great extent, the Mahommedan priests, actuated by zeal for their religion, instigated their patron to overthrow the heathen dynasty : but such a daring plot proved destructive to all those concerned in it. The Chinese, the most numerous body of foreigners in Siam, have never attempted to make their language a general medium of communication. Even at a time when one of them ascended the Siamese throne, the Siamese tongue remained the language of the great bulk of the nation. It is curious to remark how the Chinese descendants in this country lose their whole national character, and scarcely know their own language ; indeed, they are, in the second generation, entirely Siamese. The Siamese language almost always prevails, and is hardly ever borne down by any dialect of the numerous colonists in the country. This remark is applicable to the languages of *Pegu*, *Ava*, *Laos*, and *Cambojia*, which are spoken by a numerous population, of whom the greater part were born in their respective countries ; but, in the next generation, all their dialects generally give way to the Siamese. Even Mahommedans from the coast of Malabar, who are so tenacious of their own language, become entirely blended among the Siamese, and retain the use of their own language only so far as they retain their religion.

It has been already remarked, that the *Pali* language has influenced the Siamese considerably. By a peculiar custom, every male thinks himself entitled to enter the priesthood for a certain period. A great part of his time is taken up in the acquirement of the *Pali* language : thus several phrases and words become of general use ; and if authors want to shew their learning, they adopt expressions from the *Pali*, and may do so without fear of being unintelligible. Etiquette strongly urges the use of *Pali* words and phrases : the pride of the Siamese nobility considers the use of words spoken by the nation in general, when they are addressed by their inferiors, derogatory to their high station. No language, in their opinion, is better adapted to express those proud appellations to which they think themselves entitled, than the sacred, *i.e.* the *Pali*. Hence many words are borrowed from the *Pali*, to form a language of politeness expressive of dependance. Besides, words which express abstract ideas or scientific objects, were necessarily to be borrowed from the *Pali*, since the dialect spoken by so rude a nation as the Siamese had no expressions to define objects of such a nature.

All the religious instructions are delivered in *Pali*, which is now and then explained by the priests; so that the people hear *Pali* words constantly recurring, and become familiar with the use of them. All these circumstances co-operate to enrich the Siamese language, by borrowing from a foreign tongue, which in other respects is heterogeneous to itself. It is thus that the Siamese language has lost so much of its monosyllabic character, and has become so dissimilar to the Chinese.

The attention paid to the acquirement of the Siamese language is very great: scarcely has a boy reached his fifth year than he is entrusted to the care of a priest, who thinks it a point of honour to instruct his pupil. A love of the vernacular language is early instilled into the minds of the children, and this operates very favourably by making them read as many books as they can procure for themselves. When they afterwards enter the priesthood, they generally bestow a good deal of time on perfecting themselves in their native tongue: hence there are very few individuals who are not pretty well versed in reading and writing. The females, destined in Siam to the management of every important business, share frequently in the benefit of a liberal education, as far as this term is applicable to the manner in which Siamese children are trained; a considerable knowledge, therefore, of the language is diffused among all ranks, and is maintained by great stores of ancient literature.

The Siamese language is euphonous, expressive of the subjects spoken of: it unites in itself the simplicity of a monosyllabic with the advantages of a polysyllabic language. It wants that strength which gives it dignity when spoken, but is better adapted to the expression of tender feelings. Rich as it is, it abounds more in words of a practical nature than in a variety of expressions for the uses of common life. The system of sounds which pervades the whole, produces, when it is spoken, a musical cadence, which might be more agreeable to the ear if there were not so many diphthongs in the language. If all the treasures which the language possesses were used, it might be a very excellent medium of communication; but the words used in conversation are so few that it has the appearance of monotony. The *Cambojian* has many rough sounds; the *Peguan* is remarkable for harshness, the *Laos* for clumsiness, and the *Burman* for an abundance of nasals; while the Siamese maintains among them all the same character as the Italian among the Roman dialects. The reason why it has not spread to regions beyond the Siamese frontiers, must be sought for in

the unsociable character of the nation which speaks it, and not in the language itself. Foreigners belonging to the neighbouring nations learn Siamese very easily, and speak it very idiomatically. The whole language is quite adapted for poetry : it possesses all the expressions for the most romantic subjects, and the words bear a great resemblance in sound to the ideas expressed ; but it is poor in variety of periodical constructions, which constitutes one of the greatest beauties of a language. Amongst the languages of Southern Asia it stands very high, not only on account of its euphony, but far more for its copiousness.

Compared with the Chinese in regard to sounds, it is richer, because it has more initials, diphthongs, and finals to form them. Though the tones so essential to the monosyllabic languages are the same in number with the Chinese, they are more distinguishable. It is generally known that neither the sound nor tone is inherent in the Chinese character, but that they are read in different ways, whilst the significance of the character remains the same in all the countries where the Chinese way of writing is adopted. The Siamese marks the sounds as well as the tones with the letters, and not the least ambiguity remains as to the tones with which the words must be pronounced. The whole system of vowels is founded upon the rules of accentuation, so that every syllable is plainly marked. This precision is made still more manifest by certain signs indicating the tone, which, however, are frequently omitted in writing. It has frequently been a matter of astonishment how the four hundred and ten different sounds of the Chinese language could, though varied by accentuation, become a medium of communication for so great a multitude of objects ; at the same time, it is evident, that however nicely the tones may be marked, the names of many objects must have the same sounds and tones, and therefore necessarily be confounded. The greatest ingenuity, as well in the formation of the characters as of the sounds, has removed the first difficulty ; and confusion in the second case is obviated by using in the colloquial dialect, either synonyms or similar words together, where the single word might be mistaken for another. The Siamese being far richer in sounds, makes up the deficiencies alluded to by composition, so that few words remain ambiguous on account of their sounds.

In point of etymology, the Siamese, like the Chinese and all the Indo-Chinese languages, is indeclinable. It admits of no difference of termination to express the gender or number, nor are there in the verb any alterations to

shew the moods and tenses. This stiffness is little supplied by particles expressive of those relations which in other languages are pointed out by the termination. With the ideas we entertain of languages, we think this essential to perspicuity, while neither the Chinese nor the Indo-Chinese always feel the same necessity of expressing their ideas with similar precision. Hence the efforts of authors, to find an exact etymological analogy between these languages and the European, have proved futile; and even the least treatises of the most penetrating geniuses have amply shewn, that the way in which these eastern nations think and express their thoughts differs widely from our own. The principal part of etymology in these languages, consists in unfolding the system of tones and sounds, and in showing their relation to each other : so far we have native works for our guides. A full treatise on those particles, which constitute so conspicuous a part of the language, by being substituted for grammatical declension, will render the whole etymological part conspicuous. These remarks are fully applicable to the elucidation of the Siamese language, which will appear in its true light in this point of view only. The language is rich in particles, so as to render grammatical terminations as plain as possible, but the best writers seldom make use of them. It is only in common writings, and in the colloquial dialect, that these particles are now and then used. Hence arises the great ambiguity, which does not escape the most superficial observer.

The syntax of the Siamese language is simple, like that of the Chinese. Where the most important relation of words to each other cannot be expressed but by position, the construction is fixed, and naturally stiff. The stress of words occasioned by interchange of position is entirely lost, and this monotony, which always recurs, renders the most flowing Siamese style languid. Besides, every Siamese author strives more to express, in all his sentences, a certain *numerus* or cadence, than to give his ideas in the most proper words. This affectation is highly injurious to the natural and most simple arrangement of expressions, and even obscures whole sentences. On this account the most trivial expressions are difficult to be understood ; and instead of tracing at the first sight the flow of thought, one is frequently at a loss to account for the connection. The Chinese language likewise requires this cadence in most compositions, but it is seldom carried so far as to mutilate the sense of the writer. In other respects, the Siamese and Chinese syntax is almost the same, with this exception, that the former is more varied than the latter.

A general rule for the acquirement of a good Siamese style, is to avoid as much as possible the use of pronouns, prepositions, and conjunctions ; to join synonyms which correspond in sound to each other, and to introduce in the same sentence many words commencing with the same letters. Almost the whole, therefore, consists in the study of euphony, with a total neglect of the sense. There is no work enjoying the favour of the public which is devoid of these ornaments : the style is exceedingly diffuse, frequently copious, but never nervous. Ingenuity, satire, and antithesis, are as strange to the style of diction of the Siamese language as to the character of the nation. Their descriptions of natural scenery have all the simplicity and sublimity which we admire in HOMER. It would be difficult to translate ARISTOTLE into Siamese, but *Paradise Lost* and the *Iliad* could be translated with all their natural beauties. Whilst the imagination is highly interested, the understanding slumbers for want of entertainment.

The Siamese literature is very rich. The present generation has not in the least added to the stock of their ancestors, but is anxious to enjoy the treasures bequeathed to them, without any desire to improve them. Most of the books are dated before the Burman invasion : there are very few books of high antiquity, if we except those in the *Pali* language, and translations from them. Many works have been lost, as the invaluable art of printing has never been introduced into Siam, and the Siamese themselves are too indolent to transcribe them ; besides, most of their works consist of fifty or sixty volumes, which renders a complete set a great rarity. The royal library alone preserves the works complete.

Most of the Siamese works are romances. Giants, dwarfs, fiends, angels, and a hero possessed of supernatural powers, are in their fictions indispensable. They begin generally with a prayer, like that addressed by western poets to the Muses. A kingdom is then introduced, which, on account of its extent and excellence, was the wonder of antiquity. There usually reigns a king, having two sons, who, being eminent for bodily and mental accomplishments, desire to try their fortunes, either in a voyage to Ceylon, to perfect themselves in the sacred language, or on some perilous expedition ; they then commonly enter a forest, meet with the strangest occurrences, ascend to heaven, conquer ghosts, kill tigers, fight with giants ; and, finally, find partners, with whom they set out in search of new adventures. These are the leading features of all the Siamese romances. The authors are less anxious to relate than to describe ; therefore they take every oppor-

tunity to depict the places and scenery where their hero is found, so that the continuation of the narrative seems almost forgotten. It is in this art of descriptive poetry that the Siamese excel: their descriptions are truly grand and striking, and not surpassed in any other language.

There are books written in a dialect similar to the language of conversation; these are very few, and little esteemed by the people: they are generally historical, never descriptive. By far the greatest portion is written in rhyme; they are more dramatic than romantic, but never historical.* They are the most ridiculous fictions, carried through many volumes, without any care to avoid repetition. Amorous intrigues form the general topic of these books; decency is frequently disregarded, and nothing, however shocking, is omitted to embellish the narrative and to interest the passions. They are read in a drawling voice: the perusal of them is, as pernicious to chastity, prohibited to the priests. Of this class are the following: *Pra-ti-na-vong*, *Pra-sú-t'hon-nang-ma-nó-rat*, *Sí-p'hin-kú-man*, *Ma-na-mo-t'hat-pat-va-t'ho*, *Pra-chan-t'ha-kú-man*, *K'ho-bú-t'hon*, *Chan-t'ha-krop*, *Seng-pra-chan*, *Pra-pa-t'hom-ban-t'hon*, *Sa-mút-chin-k'ha*, and *Seng-na-rong-chit*.

Of a different nature is another class of works, exclusively romances, and the most numerous of all; the greatest of which consists in the delineation of natural scenery, by corresponding forcible expressions. A tempest will be described by the most harsh sounding words in the language; female beauty will meet an equivalent number of the most melting expressions. Nothing surpasses the description of human passions, for which the language is so copious in expressions: rage, love, pride, contempt, are represented with the greatest truth, even by the sounds of the words chosen for the purpose. There is scarcely any thing historical in these books, but the whole is a continuation of poetical effusions, for the connection of which a tale is kept up. The following are of this class: *Pra-sa-mút*, *Lak-sa-na-vong*, *Pra-pai-mă-ní*, *Pra-t'ham-ma-ha-ka*, *Lín-t'hong*, *Pra-ma-lay*, and *Nan-t'húk-pí-lat*.

Those works which the Siamese sing in their plays, keep in diction a medium between the language of conversation and that of the books above-mentioned. The most famous of these are the *P'hrăh U'norút*, and *Enan*.

There exist many works upon medicine; some upon physiology, physiognomy, and astrology, and a great multitude upon religion. None of these are well executed, but rather puerile. Grammatical works of their own are entirely unknown, and no scientific work has ever made its appear-

* Sic MS.

ance. Though there are at *Bangkok* some royal professors of the language, literature is by no means encouraged, nor is any preferment bestowed upon those who excel in it. Even works of fiction are in this age no longer multiplied; among the myriads of priests, there is not one who could be styled an author. Thus the state of things must remain till the Almighty hand of God promotes among the Siamese the saving knowledge of the Gospel, and gives to their mind a new impulse.

SPECIMENS OF SIAMESE STYLE.

No. 1.

“ *Nang sú sūt.*” Books in rhyme.

“ *Pra su tonie mah nura.*” Vol. I. page 1.

A NARRATIVE.

K'ha k'ho bung kom	Yok kon pra nom
Pra nok bautah mán	Som det chäh
Pra chaou an kow	Sú ne phan
Prot sát song sán	Paun chäk lo ko
Vae kún prah pút	Ah seip hők búre sūt
Nap neuwa ha sí	Wy pra taum
Saum seip pat anme	Ya kún seim seip se
Paën te na massah kan	K'hún biddah mo daun
K'hoon krú pae hak saum	Hoo pacha a chan
Yoh kún wy sin	Kun sin kun taun
Koh k'hlan taun raun	Sú tún ma nu rah
Ruang row taun ne	Taun wy ballú
Taun pú tde kah	Raou bú t'hú chaoun
Meút moun nak nah	Dy fang taum mah
Tseng wo rúang kwam	Pra hong sát saddah
Set cha pae mak ah	Cha tu won raum
Pek k'hunung kra san	Ma tu kaum
Sah-vo-rat tún t'haum	T'het sah na pret praum.”

Translation.

“ I beg to make my obeisance, raising the hands, joined, prostrate, adoring God, most high, eternal—have mercy upon the beast, commiserate me when I leave the world. I pay respects to BUDD'HA, fifty-six times blessed; I raise the hands over my head, I adore the grace of the holy books, of which there are thirty-eight,—in which the adorable

No. 1.

Part of a Work in Rhyme. (P. 300.)

๓๗๖ บัณฑิต ออกร่อนประนม ประนมบ่อประมาร ล้มเดด
 พระเทอญเจ้านิกร ไปรยาสดสงสาร พนจากโลกิ ๗๖
 ให้อยู่คนพระพร ทาสีบกบอริสัด นับเห็นวเกนนิ
 ให้อยู่คนพระธรรม สวมลิบแปดอนันต์ คนสิ้นลิบศิร เป็น
 ที่มัสการ ๗๖ คน บัณฑิตมารดอน คุรภักตกษร อุประหัตถาทรย
 ออกร่อนไว้มัน คนสิ้นคนทาร์ ให้ออกแล้ว ทำนมน สกนมะ
 โนรา ๗๖ เริ่มทวงทวงนี้ ทารให้อยู่บาฬี ตามพัญญู เร
 บุทุกบ้น มืดม่นหนักหนั โอโยพริธรรมมา ให้อยู่ริ้วคตม
 ๗๖ ทำนมนสกต สดจะไปโยหนมะทา เซตวันนรณ ภา
 หนึ่งน้น กระสน์มาตุคต มาวัดทลภม เกตณโปรดปรน๑

No. 2.

Part of a Romance. (P. 301.)

บัดเดยวิใจเป็นสายพิรุณริน กระเบนพองพุ่ม พย
 กระทยอดบ้ เพ็ชรรังษัดบ้ ไปดงใจทอวัน รัชทายน
 พาลมาในเมตติบ อัสรันไลโลด กระโดดตาม ถาน
 พระเวดเมษมิดเป็นมอกพยับ นอมอับดินพ์ หนึ่งส่นน
 ไผ่เขนท่นสรีนั ด่งย่ำยาม พระโชนมทนกวดแกม
 พระแสงทศร เป็นลุ่มพดัดหัดท้อกระพัวทวน กิเชชวัน
 ปญกษปัททัง เมษกระเด็นเขนอิม พระสรีนั จะกระ
 พงบนี้ในพระไทพลัน จักรอรับอัสรีนเห็นทศ ๑

mercy is fourteen-fold. I reverence the kindness of father, mother, and the teacher of letters, a clever doctor. I raise the hands, and make my obeisance to all; the favour of all together,—and to thy grace I beg leave to speak about the knowledge of Su-tem-nu-ra, and of this history. I pay respects to the religious book, which is according to truth. I am stupid and exceedingly dark. When I shall hear religious books, I shall know historical facts. The most high shall go to dwell in the temple of the disciple, and approach the illiterate, so that he can speak, investigate, and shew benignity.”

No. 2.

“ *Nang súhan.*” Reading books.
 “ *P'hra sa mút.*”—Vol. III. page 30.

A ROMANCE.

“ Bât déu chae pen sae pe rú rin krah chen faung f'húm fae krae chae daup plaing rah graupdaup pae daung tohae ta vin rip t'hae yan pan mah nae makin ah súrin lae loet kra doet taum haun prah vat mak meit pen mok pa yah um ap din fah nah sah nam mae hen hon soay you dang yum yam pedah chom ngaum kwat kwang pra seng song pen lom pat haut enah krah peuah un aun ku say soon pri so sah pahra hong mekra den hen deung prah súrí yong chak krah pong nyeuk mae prah tae plaun cho ro rop ah súrí.”

Translation.

“ Immediately he was angry, he raised the dust, the fire was scattered and extinguished. Being extinguished, he went away with indifference, and suddenly, hovering about, he entered a cloud. The giant, making grimaces, looked about, started up, and followed, and read a prayer, while the cloud became dusk as in twilight. Striving to grasp heaven and earth, cursing, not seeing the course of the sun, which was almost darkened. A fair one waved his sword, the wind blew, and the perspiration rose on his skin, and he began to faint. In the midst of the trees of the forest he lay exhausted, the cloud vanished, the sun and moon appeared, the mighty resolved in his mind to surround the giant, and looked towards him.”

No. 3.

“ *Prah ronah rú.*”—Vol. VI. p. 1.

A DRAMA.

“ Menya nan tschang chaum núun nang úsah faung nang sú pah lak kullah yak ouk naum prai yot fah yah tshai hai me gwum yin de pen te sút nounge nút pim pún pit set mai dang dai haen k'hah pra song chae mah teit nai daung neit kullah yah prok kú saum nun doon daun cheit tshing hai seng peit sah vaet pen nak doú tey van ai ya tshun laung mah vaut sa nah tsah kú kooun kundaung k'hai o num sú haum reit maun súng deong

tschei rit save sun ko sún saun so kah tsha baun kah lah yah tschun chom pe raung tschai tscheing vauh pét sú pah lak kun tah tschang neú nah vae cha pen tscha hai tschong veng veng hók heun taum neun pai vaat rúp púvah nae mah baut ne."

Translation.

" Then the fair and beautiful lady USAH, hearing the lady her governess uttering the name of the mighty in heaven, comforted her heart, and roused her to exceeding joy. The dearly beloved and beautifully fair appeared to see the prince, who came to fix the endeared in the apple of his eye. On account of this heroic action the people were dissatisfied; but she was excessively precious to him, because the blessed angel had descended and had caused them to be united. He took the holy wonder-water, eagerly sprinkled it on the breast of the wounded, troubled, afflicted, dejected, and mournful spirit. The lady was highly delighted, and rejoiced, and said, ' Why, Lady-governess, do you tarry? You must ascend and suddenly start away,—the image of the prince has just appeared.' "

No. 4.

A translation from the Palí into Siamese.

Tschow kah chow tú.

A RELIGIOUS WORK.

" Sa t'hí p'hu dae me panyu pút sa tak sa prak krai sahraha na kom rak sah sin la pen nit tsah sin lo taung yew nai tut sah kú soun lak kaum mah baut sip p'hra kun taung yew nai ka see p'hrah kun lay p'hra tsac baup taum sip se toh p'hra tsch tsack hah kú saun tah tsa kom ma bót sip p'hra kaun tschaddai tschen vah pú naun me sah te paun ny a haup p'hra tú tschě tú rah lai seah dai maun kaun pú haum ko tscha bai nah pae sú sah vaun som bah de p'hra ne pah nah som baut te pem aun teing tey ley."

Translation.

" Blessed is he who has understanding, and who keeps and observes the inscrutable God, and always obeys his commandments; remains stedfast in virtue, and the observance of the ten precious things; remains in the four rites, and exposes impiety, and publishes openly vice, wickedness, and the ten profanations. A man of this description can be called truly wise and prudent. He keeps guard at the door against all blasphemy and folly, so that he may be established. Such a man, in future, will go to heaven, so desirable to the benevolent God. This is true and certain."

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N^o 7. Part of the 3rd Chapter of the Acts of the Apostles, as translated by the Protestant Mission in Siam. (P. 303.)

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No. 5.

PALI.

Chit taum naun.

MORNING AND EVENING PRAYERS.

Sak kay tah may chah rú pey ke le sit k'ha rah ta tey tschim tah le kay hwuy mah nay le pey ra tay cha ka may tah rú won nah ka ah ney pey mah ke tey hú ma cho yun chú tey var cha lah ve sah may y'kah naun toók sa tey hey yaung mune mah cha nang sa vant cha rú may sú nan tók."

Translation.

" Give us, who are strangers, to know and understand the inconceivable mysteries, which are higher than the sun and moon and all the angels together. Redeem us all together from all evil, that which is hidden, as well as that which is well known."

No. 6.

Tawn ra rak sa p'hra acha rí púi say.

A WORK ON PATHOLOGY.

" Ko me lung te hai pen para deck te me hauk kome mun hai heen sai ei vien na múah laung te hai laung t'haung hai rahk lom p'hlow laung hai seip keng kah daung pún how te laung hai seo túyah sarah paung túwah laung tú hai chuk hok kang yew hai kaut ok kan toe mun un dai koh leng yew hai toe laung te hai túwah keng ne peit hai kun raun tow kú me laung te heu tein mú yen me chep mán hai pen pai pen lai pra kun."

Translation.

" Frequently sickness makes one costive, so that there is no discharge, and causes hardness of the bowels, flatulence, dizziness and darkness. It frequently occasions dysentery, vomiting, wind, and emptiness; often produces itching, and constriction in the legs and feet, as if one had beaten himself with wood; sometimes destroys the whole body with the limbs, brings on colic, hardness of the breast, and causes obstruction in the chest and the larynx, makes the body red and distorted, and the countenance full; frequently disables the hands and feet, and occasions many wounds."

No. 7.

The Acts of the Apostles, c. iii. v. 1—7.

As translated by the Protestant Mission in Siam.

" Nai kalannan Paytro kap Yohan k'heun pai vechān kaninot pavānah pelabai sam mong lay lang kan t'he ngoi tayrek kran may deng t'han pú seng kaou bēk vai

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t'hũkwān nă prattú vúhang chenwa prattú ngám kotan taypú kow pai nawúhan layö chinghan Paytro kap Yohan tchăkowpai tívihan díúnan kotan layö Paytro kap Yohan klowwa kamen dú row ne t'heút ching mong dú tang song koíta rap tan nang sun Paytro chingwa ngún tong row komaimí t'ha rowmí yew kocha hai tan tan bechăchenwa Yaysú Chrisăto chaou Natzaret lukeûn pai ching yit owmen sai pai yung kûn kunan fa tin ta tún ko k'heng reng."

No. 8.

Extract from the Roman Catholic translation of the Mass Book.

" Bot P'havana p'helavan. Bot noi

" Hai vai namasacan P'hva lei t'havai tua.

" O p'hva: O chau kpey wop-nop-sop vai namasacan p'hva: ong p'hva p'hu peu lí thiàng t'hu tu phu diad dai phvadae, sat'hanseng fa acin lu savap'ha ama tu plau pen chau kí t'hong lai kpe k'hó sealong Pme dai sang kpe malí phvod panja lu chai cha dai vuchue lí vai chau p'hva: ong dai pvod lu'at sau kpe tu nai clang na y pvat'het p'hon chai mu't vuchae sam p'hva: ong pho lu luc lu su'ng luc p'hva: ong p'hva: Jesus chau dai long ma vapp peu k'hon lam bac tai kú k'hai hap manut t'hang lai nan p'hva: ong dai pvod kpe vu lí xu'a lu p'hung p'ha a sai p'hon chai bap k'han pen christang luc p'hva: sam vap savuci k'huam bovom ma suc duai p'hva: ong peu xua udon."

Translation.

" MORNING PRAYER: A short section.

" Let us adore God and surrender ourselves.

" Oh! Lord, oh! God, receive our homage and adoration. Thou art the living, true, and only God, who hast created heaven and earth, and all things, out of nothing. Thou art the Lord of all. I praise thee Grant me understanding and an intelligent heart, and love towards thee, oh! gracious God. Thou hast chosen me from among the heathen to forsake darkness. I trust in the Trinity, Father, Son, and Holy Ghost, who are one God; and I believe that the Son of God, the Lord Jesus, descended, became man, suffered, and died, for the sins of mankind. The Lord can forgive my wickedness, and vouchsafe deliverance from sin to me, who am a Christian and a child of God, so that I may enjoy eternal happiness, for the Lord's sake."

XVI. *An Account of the Island and Bridge of Sivasamudram in the Cáverí River. By RÁMASWÁMÍ MÚDELIAR, Jághírdár of the Island.*

(Communicated by the MADRAS LITERARY SOCIETY and Auxiliary ROYAL ASIATIC SOCIETY.)

Read 17th of December 1831.

INTRODUCTORY NOTE,

BY

JAMES S. LUSHINGTON, ESQ.

Secretary of the Asiatic Department of the Madras Literary Society and Auxiliary Royal Asiatic Society.

THE materials for the following account of the island of *Sivasamudram*, together with the description and plans of the bridges which have been built, and are now building across the two branches of the *Cáverí*, were furnished to me by RÁMASWÁMÍ MÚDELIAR, the intelligent and wealthy *Jághírdár* of the island. As regards the antiquities of this celebrated place, I regret the imperfection of the memoir; but I am willing to hope that it will not be considered wholly destitute of merit. By the curious in architecture, the faithful representation of the bridges, and the plain description of the manner in which they are constructed, will be valued; while, to the observer of the human mind, and the speculator upon the progress of improvement in India, it must be an object of interest to mark the modes of thought and feeling entertained by a Hindu, who, in strict accordance with the precepts of his religion, undertakes a great public work, which would do honour to the professor of any religion, and to the citizen of any country, in any age. With a view of exhibiting, not only RÁMASWÁMÍ's natural sentiments, but his manner of expressing them in the English language, I have made very few corrections in the composition of the memoir. The first part was less perfect in style than the last; but in it I have preserved the original language, with as few alterations as could

possibly be made, without leaving it in a state which would have shocked the ear of the English scholar. In the latter part, containing the account of his own bridges, where the subject-matter came home to his own business and bosom, and where, consequently, RĀMASWĀMĪ wrote with more ease and vigour, I did not find it necessary to make more than one correction, and that so trifling, that I may say the last part is presented to the reader in its original state.

It may here be proper to point out the inaccuracies into which HAMILTON has fallen in describing the falls of the *Cāverī*. The height of each fall is much underrated; that of the *Gangana Chuki* being about three hundred and seventy feet, instead of from a hundred to a hundred and fifty feet; and that of the *Birra Chuki* about four hundred and sixty feet, instead of a hundred feet, as stated by HAMILTON.

The Wellesley bridge at Seringapatam traverses the river in a winding direction. This tortuosity, it will be observed from a reference to the plans, is also the characteristic, in a much greater degree, of the bridges more recently constructed by RĀMASWĀMĪ, who derived the idea from observing the line of the ancient ruins still standing in the bed of the river; and, as he himself remarks, the manner in which his first bridge has stood against the severest floods, proves the excellence of the principle which he has adopted.

(Signed) J. LUSHINGTON,
Sec. Asiatic Department.

ACCORDING to tradition, the island of *Sivasamudram* is the most holy of places: it has its situation in a forest, and was the residence of the seven *Rishis* (or patriarchal sages) during the *Trétdyuga*, the second or silver age of the world. It is said, that as these *Rishis* or *Tapaswís* were once performing their ceremonies, two serpents, named TĀCŠHACA and VĀSUKI, apprehensive of the attack of GARUDĀBHAGAVĀN (or the divine bird and vehicle of VISHNU), came to these *Tapaswís* for protection, who offering them an asylum, obtained a promise from one of the serpents, that named VĀSUKI, that the people who should in future come to this place should not be exposed to the venom of his species. VĀSUKI having given this promise, the *Tapaswís* remained performing their devotions. It is said also that God appeared to VĀSUKI, and offered his protection upon the same promise;

and as VÁSUKI was offering up his devotions to God, the seven *Tapaswís* came to visit God, and being alarmed at the earnestness of VÁSUKI's devotions, they also addressed their prayers to God with great fervency of spirit, until God granted them their desire, that no man should in future cast his eyes upon VÁSUKI until all apprehension from the serpents that should thereafter be generated on the island, should have ceased. God, moreover, directed VÁSUKI to live under ground, and only gave him liberty to come out at such time as he had to perform his *Pújás*. VÁSUKI accordingly lived in the *Pátálabca*, and became a worshipper of RANGASWÁMÍ. While God was thus receiving *Pújás* from the *Tapaswís* and VÁSUKI, some *Brahmadévatás* and other devotees came also to visit him here daily, and perform their ceremonies.

It is farther said, that the moon having been cursed by God's priest upon some occasion, and deprived of her brightness, she prayed to I's'WARA, and requested of him to allow her her full splendour; whereon he, favouring her with his presence, told her that she should go and make her devotions in the holy place called *Dandakáraniam* (where the seven *rishis* and other devotees were passing their time in a holy manner), and assured her that he would appear to her there and fulfil her wishes, by restoring her to her brightness. The moon did as she was instructed, and performed her devotions, by which she obtained her wish. This circumstance of the moon's having obtained her full brightness, made a great impression on the hearts of all those who resorted to the island, so that they said, "That whosoever worshipped I's'WARA in the name of SÓMÉS'WARASWÁMÍ (or the lord of the moon) on that island, and would perform religious ceremonies, distribute alms, and perform the *tarpanams* (or ceremonies to their deceased relations), and feed the *Bráhmans*, would undoubtedly obtain the remission of all their sins, and would also meet with every prosperity and the enjoyment of their wishes, in like manner as the moon had been restored to her brightness.

It is said also, that while these *tapaswís* and other devotees were passing their time in offering their *pújás* in this holy place, one JAMBÚCÁSURA, a giant, and of the sect of the great RÁVAN'A, gave great annoyance to them, and they finding it a great interruption to their devotions, quitted the holy place and proceeded to the *Godávári*, which is to the north of *Dandakáraniam*; but a virtuous *tapaswí*, one of the seven *rishis*, seeing this, feared that the removal of these *tapaswís*, and other devotees from the island,

would cause the place to become desolate; he therefore prayed earnestly to BRAHMÁ that the giant might be destroyed: whereupon BRAHMÁ appeared to him, and told him that RÁMASWÁMÍ would proceed to *Lancadwípa* to avenge him of his great adversary RÁVAN'A, by way of *Dandakdraniam*, when he would appear to him, and his wishes for the destruction of the giant named JAMBÚCÁSURA, would be fulfilled by RÁMASWÁMÍ's disguising himself in the shape of a woman and killing him. The other *rishis*, when first acquainted with the promise made by BRAHMÁ to the above *rishi*, were not quite satisfied, and put little faith in the promise, but BRAHMÁ once more appeared to them, and told them to fear nothing from the giant, for that God would not leave them, but reside on a tree there till the giant their enemy was destroyed. Thereupon the *rishis*, returning to the island, continued to perform their devotions; and while they were doing so, RÁMASWÁMÍ forthwith came to the island and destroyed the giant, to the great astonishment of all the *rishis* and other devotees: and after performing ceremonies to his deceased father in this holy place, went away. When they saw this, they glorified BRAHMÁ for the victory over the giant their enemy. The *rishis* after this lived in great tranquillity for a long period, and then passed away to the other world, from which time the island became desolate till TERUCHOLARÁYEN discovered the place.

TERUCHOLARÁYEN, of the *Cshatriya* caste, was a petty king of *Káraladésem*, on the Malabar Coast, who having by some accident fallen into the great sin called *Brahmahatyá* (slaying a Brahman), found it necessary, in compliance with the behests of the *S'ástras*, to proceed to the river *Cáverí* to expiate his sin, by performing devout ceremonies, building temples, and distributing alms. As he travelled in search of a place where he might accomplish his intended purpose, he came to the island of *Sivasamudram*, where the river *Cáverí* nearly terminates; and deeming it a suitable place, he settled himself there, and became the first king of the island. Here he exerted all his authority, and applied all his resources to the erection of temples, provided for the performance of daily *pújás* and ceremonies, and granted *agrahdrams* to the *Bráhmanas*. He also obtained possession of twelve other villages on the western side of the neighbourhood of the island. The population was at this time comparatively small and poor. In his reign the *Rangaswámí* pagoda was erected. These possessions were governed by him in peace about a thousand years ago; and after his death, VISHNUVARDHANEN, his only son, succeeded him, and ruled over the kingdom in peace

till the day of his death, when he was succeeded by his son SRÍRANGARÁYEN. The reigns of these three sovereigns are supposed to have lasted about eighty years; and after the death of SRÍRANGARÁYEN, the island and its dependencies went to decay for a short time.

After a lapse of time, GANGARÁYEN, a petty prince of *Umathun* in the district of Mysore, also of the *Cshatriya* caste, but of the sect of *Síva*, is said to have visited the desolate island; and finding it quite in a ruined state, he took measures for its improvement, and built a fort with gates of brass, and a bridge on each of the branches of the *Cáverí*, by which the island is formed. He also repaired the dilapidated pagoda of *Rangaswámí*, and enlarged the ruined pagoda of *Sómés'waraswámí*, which is said to have been found on the island when TERUCHOLARÁYEN, the first king, took possession of it. This prince is said to have committed suicide by plunging himself into the cataract which is formed by the western branch of the river. The following are said to have been the circumstances which led to this desperate act.

It is stated that in GANGARÁYEN's reign a *chakler*, named UMBAH, having discovered a root which had the quality of making a man invisible, ground it into a very fine powder, and mixing it with a little oil, made a mark on his forehead with the composition, which, causing him to be invisible, he formed the audacious design, and actually achieved the enterprize, of frequenting the table of GANGARÁYEN, and feasting on the luxuries of the king's dishes. He continued to do this, it is said, for the space of about twelve long years, until, the consumption at the king's table on these days being unusually great, the queen observed it, and wished to know the cause of the extraordinary consumption. Having laid her plan, she one day made GANGARÁYEN bathe in a very warm bath, after which she had meals placed before him, all of which were very hotly seasoned, and caused him on eating to perspire a great deal. The invisible *chakler* being at the same time at the table partook of the same hot dishes, which causing him also to perspire violently, his enchanted mark dissolved and dropped off, when he was instantly discovered by the prince, and on being questioned who he was, declared the truth, and fell dead on the spot. The king finding that he was defiled by having eaten with a *chakler*, consulted the *s'ástras*, which directed him, for the expiation of so great a sin, to plunge himself and his wife into the *Cáverí*. In obedience to this mandate, he caused his favourite mare to be saddled, and taking his wife behind him,

proceeded to the falls of the western branch, from the precipice overhanging which he leaped into the "roaring whirlpool" beneath. This fall has hence received the name of *Ganganachuki*, or the leap of GANGARÁYEN, and the most perpendicular part of it is called, "*The Mare's-tail*." This prince is said to have reigned about sixty years; and after his death, his younger brother, named NONACHÍ GANGARÁYEN, succeeded him. He governed the country in the greatest tranquillity, supporting and encouraging, as his brother did, every devotional ceremony and charitable institution. After a short time, however, finding the possessions of his hereditary kingdom too small, he seized some districts belonging to the Poligars, viz. *Palliam, Singanellore, Bundahully, Hajipuram, Colligal, Muduganda, Jiraganellore, and Gundagalem*. He had a son GANGARÁYEN, and a daughter named MÍNÁTCHAM'A, who was given in marriage to ACHYUTARÁYEN, a petty *Rájá* of a *Drúg* called *Kelemalay*, near the *Mudhalli Hills*. NONACHÍ GANGARÁYEN reigned peaceably for the space of about forty years; and after his death, his throne was left to his son, who after a peaceable government of about thirty years, was dethroned by his brother-in-law ACHYUTARÁYEN. The cause of ACHYUTARÁYEN's enmity against his brother-in-law, GANGARÁYEN, was as follows.

It was a habit of MÍNÁTCHAM'A, ACHYUTARÁYEN's wife, the sister of GANGARÁYEN, to boast, in the presence of her husband, of her father's possessions; and among other things, she would talk in vaunting terms of the brass gates of her father's fort at *Sivasamudram*. One night in particular, as she was in bed with ACHYUTARÁYEN her husband, she said to him, that she heard the sound of the brass gates of her father's fort closing. ACHYUTARÁYEN, provoked at her remarks, the next morning besieged the town with all his troops. GANGARÁYEN, apprehensive of a severe attack, and finding the bridges now unsafe, had them both broken down, by which means he was enabled to hold the island against the enemy for twelve long years; at the end of which time, they finding it still impregnable, bought over GANGARÁYEN's confidential secretary, and through his treachery, ACHYUTARÁYEN was enabled to enter the island with all his troops through a secret pass. GANGARÁYEN, on discovering this treason and its fatal effects, collected the whole of his family and relations together into the castle, and entering himself last, sprung a mine which had been prepared, and with all his family was buried in the ruins. When ACHYUTARÁYEN entered the city, and witnessed the dreadful scene of havoc in the palace, of which he had

been the cause, he was immediately struck with remorse, and returned to his own possessions. But one of the *Sardárs*, a Musselman, established himself in the island, and kept possession of it for about fifteen years ; at the expiration of which time, as he was one night going through the streets of the city, he was attacked by a seven-headed *cobra de capella* : as soon as he saw it, he attempted to strike it, but the serpent spitting forth his venom, laid him dead upon the spot. After this, the island becoming a dependency of the Mysore territory, was scarcely inhabited, and went to utter decay. All these sovereigns were worshippers of RANGASWÁMÍ and SÓMÉS'WARASWÁMÍ.

Account of the Island since it came into RÁMASWÁMÍ's possession.

I first visited the island in the year 1805, in attendance on Colonel WILKS, then British Resident at the court of Mysore; and it was at that time the abode of tigers and other wild beasts, the jungle being almost impenetrable, and all the buildings were in a state of utter ruin.

The restoration of the island to its former sacred and charitable purposes, had long been the subject of my anxious thoughts; and accordingly, in the year 1818, I made proposals to Government, the conditions of which were, that the island of *Sivasamudram* being given over to me and my heirs in perpetuity, together with a tract of jungle land, purposed to be occupied by inferior castes, I undertook to clear the island of the jungle, to erect a wooden bridge on the eastern branch of the *Cávéri* from the Coimbatoor side to the island, to build a bungalow for travellers, and to restore some of the religious edifices.

My proposals were accepted; and in the year 1819 I made preparations for these arduous undertakings. From further inquiries, and after due consideration, I was of opinion that a wooden bridge would neither be lasting nor safe; and I accordingly determined, without applying for any additional remuneration, to construct an edifice of permanent materials. The site of an old bridge was pointed out, and I resolved to erect the new one at this spot, and on the same principles of construction as the former appeared to have been.

The edifice was accordingly undertaken, and completed in the year 1821, according to a plan, a copy of which accompanies this memoir.*

The clearing of the island, and other works which I had undertaken to execute, proceeded at the same time with the construction of the bridge; and the difficulties which I had to encounter were greater and more numerous than I am able to detail. The climate of the island and surrounding country presented an obstacle hardly to be overcome; very many of the work-people, all of whom were brought from a distance, died from fever and dysentery; others were obliged, after having been attacked by sickness, to seek recovery elsewhere; and not a few deserted the works from the fear of the diseases, which they saw making such sad havoc among every description of workmen.

To all of them I had been under the necessity of making advances of money; and my losses from their deaths, sickness and desertion, were very great. The rates at which all my people were paid were necessarily high; and being also obliged to provide them with food, and comforts of all kinds, my disbursements were far beyond all my previous calculations, and my trials and vexations were almost too great for endurance.

Having however undertaken the task from a sense of religious and charitable feeling, and also with a view to public utility, I persevered, and I have at length the happiness to think that I have succeeded in many of my objects, although at a pecuniary expense of a much greater extent than I could have contemplated.

The jungle has been in a great measure removed, and little is now to be apprehended from the climate of the island. The wild beasts have been driven to seek other resorts, and the present colonists of the island are healthy and cheerful. The soil of the island is bad, being rocky and full of loose stones, but cultivation is carried on to a certain extent; and although its continuance must be at much pecuniary loss to myself, it will be persevered in.

The ancient edifices of religion and charity have been rebuilt and restored, and new ones have been erected.

Hitherto the public utility of the bridge (which has been named the *Rámshatwa*) has been small, as it has only been used by those who came to visit the sacred and charitable establishments on the island; but the benefits

* This will account for the want of perspective in the plates. See Plate No. 8.

which will be hereafter derived from it, when the bridge now under construction on the western branch of the *Cáverí* shall have been completed, may be considered incalculable. By these two bridges, the communication to and from the possessions of the Honourable Company and the territories of his Highness the Rajah of Mysore will no longer be difficult; and the merchant and traveller will not hereafter be liable to the dangers which have attended the passage of the *Cáverí* in the unsafe basket-boats, nor to the inconvenience of detention on the banks of the river, when the passage, from its extreme rapidity and great depth, could not be attempted in such a conveyance.

I had for some years been anxious to see this communication established; and when the Right Honourable the Governor last year paid the island and this part of the country a visit, I took the liberty to express my opinions and wishes to his Excellency. I was in consequence directed to submit my plans and proposals; which I accordingly did, for the consideration of the Madras Government, and of his Highness the Rajah of Mysore, in the month of September 1829.

My proposals were, that in consideration of certain additional grants of land from the Honourable Company, and from his Highness the Rajah, and being allowed to levy certain transit duties on merchandize, being half of what is now paid to the boat people, I undertook to erect at my own expense a bridge on the western branch of the *Cáverí*, of the most solid materials, and as soon as might be practicable.

The new bridge which, as a tribute of gratitude and respect to the Right Honourable the Governor, I intend shall be denominated, "The LUSHINGTON Bridge," is already considerably advanced, and if nothing extraordinary occurs to retard its progress, will I hope be finished in the course of next year, or early in 1832. A plan of this bridge, shewing also the progress made in its erection, accompanies this memoir.*

It will be seen that neither the *Rámshatuva* Bridge, nor the one under construction, is carried in a straight line across the river. Trusting to the skill and judgment of the ancient projectors of the former bridge, I followed the site upon which it appears to have been erected, and I have every reason to be satisfied of the propriety of the resolution which I adopted. The shape is certainly not a common one, but it seems better adapted than

* See Plate No. 9.

any other to the situation. When the river is full, the great body of the water in this branch runs in the centre of the bed ; to this the angle of the bridge is opposed, and the force of the stream, which is very rapid, is thereby broken.

The best proof, however, of the excellence of its form and structure is, that it has withstood the violence of repeated floods without sustaining any other than trifling damages, which were easily repaired. The original parapet of the bridge was of solid masonry ; but a part of it having been carried away by a great rise of the river, the whole was taken down and replaced by a wooden railing.

The length of the *Rámshatuwa* Bridge is one thousand feet, the breadth of the roadway thirteen feet, and the height, including the foundation, is twenty-three feet. It is supported by four hundred pillars, which form a hundred and thirteen *chesmas*, and the stones forming the roadway are not let into sockets, but fastened to the pillars with iron pins and mortar.

The foundations are either cut into the solid rock, or into immense stones placed for the purpose, and in many places to the depth of five feet.

I am not prepared to state, with any thing like precision, the sum which this bridge cost me. The other works I had undertaken were proceeding at the same time, and I have briefly alluded to the causes which rendered the expenditure of money enormous. I was afflicted, not only with mental vexations, but my bodily health also suffered severely. I had repeated attacks of fever, which obliged me to leave the island, and to commit the superintendence of the works to servants, who neither could nor would exercise that strict vigilance over the labours of the work-people, which the peculiarity of the situation required.

The bridge was valued in the year 1823, by an officer of engineers, at 60,000 rupees. I am not acquainted with the data upon which the valuation was made, but I consider it greatly lower than it ought to have been ; and I conceive myself borne out in this observation, when a comparison is made between the structure at this island and the Wellesley Bridge at Seringapatam.

This last-mentioned edifice was constructed under the orders of PURNIA, the celebrated *Diwán* of Mysore, who had of course all the resources of that government, as well as the skilful artificers and numerous labourers of Seringapatam, at his command.

The rates of hire and the prices of materials must, therefore, have been moderate : and yet it is well known that the Wellesley Bridge cost between seventy and eighty thousand *Canteroy* pagodas, or upwards of 2,10,000 rupees. The Wellesley Bridge is on the same principles of construction as the *Rámshatuwa* ; the former has a broader roadway, but it is not more than two-thirds of the length of the one constructed by me at this island. The highest of its pillars are from twelve to fifteen feet, while in the *Rámshatuwa*, there are many from eighteen to twenty-one.

When the difficulties which attended the erection of the bridge at *Sivasamudram* are considered, with the facilities with which the Wellesley Bridge was built, I may without fear assert, that the valuation estimate of the former should have greatly exceeded the sum stated by the officer of engineers.

In concluding this memoir, I may be permitted to dwell with some degree of vanity and self-satisfaction on the works which I have already accomplished from my own resources, and without the aid of one rupee from the public. I have to reflect that I have been the means of restoring to my countrymen access to a place and its religious buildings, held sacred from time immemorial. That I have, by perseverance, rendered lands habitable which were formerly the resorts of ferocious animals only. That when the bridge on the western branch of the *Cáverí* shall have been completed, I shall have been the instrument of opening communications which had long ceased to exist, to the trader and the traveller ; that the lives of man and beast will no longer be endangered in the passage of the rapid and deep *Cáverí* ; and although I might enumerate many other public advantages which have been, and will be derived from my exertions, I shall only further allude to the facility which now attends the visits of the curious to the celebrated falls of the *Cáverí* on each of the branches, by which the sacred island of *Sivasamudram* is formed.

Finally, I may claim the merit of disinterestedness. I have shewn at how great pecuniary sacrifices and personal vexations and trouble the works have been performed ; and I have no prospect of future recompense, nor do I ask any. The island of *Sivasamudram*, and the tract of jungle granted to me on the original agreement, were rated in the books of the Collector at 4,840 rupees per annum ; whereas, when I took charge of these grants, they did not yield to government a revenue of a hundred rupees a year ;

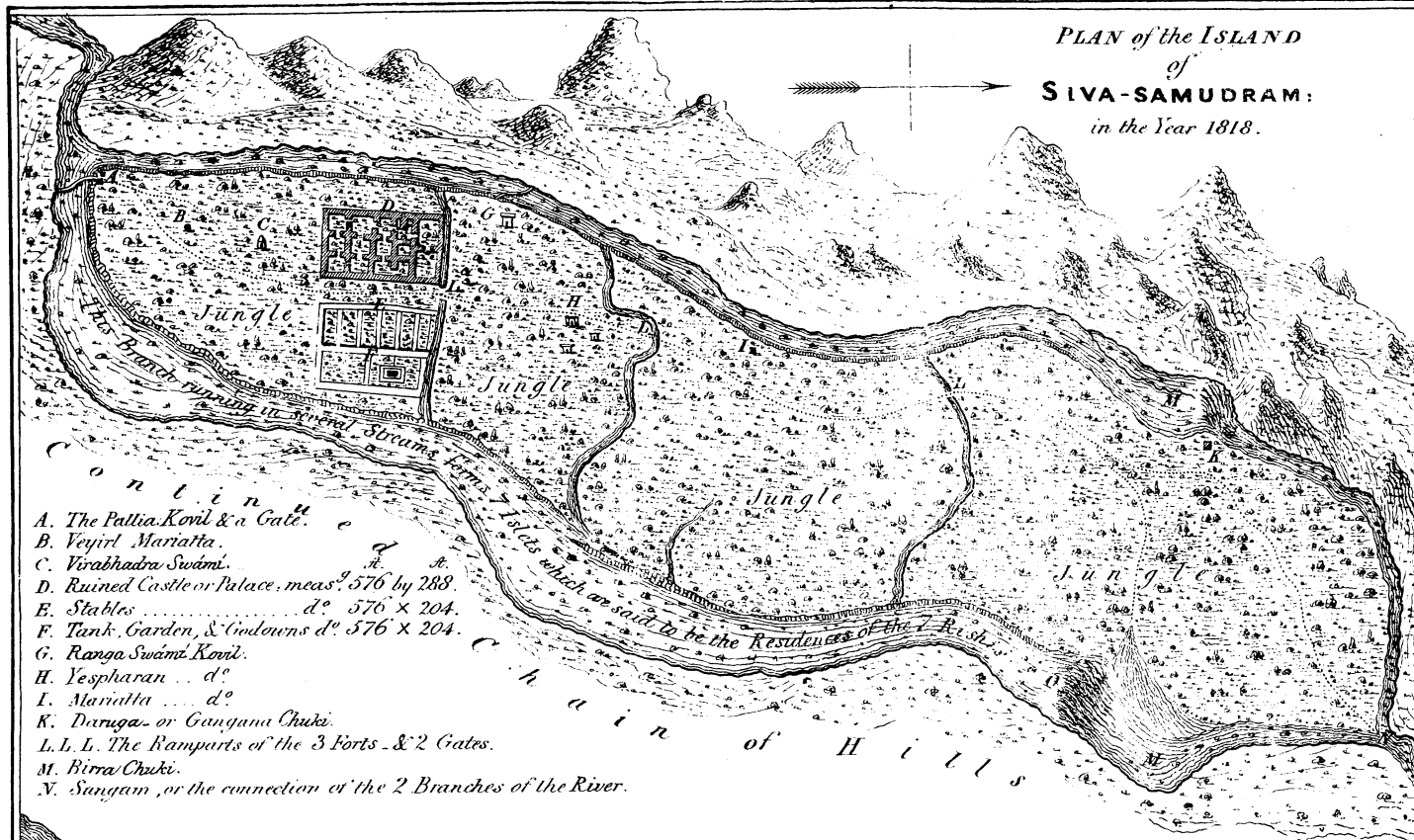
even now, when a great part of the jungle has been cleared, both on the island and the tract above-mentioned, I do not receive from them more than eight hundred rupees per annum, which may be increased, when the jungle is entirely removed, to one thousand eight hundred rupees.

My monthly disbursements for charitable purposes,—the expenses of the pagodas, and on various other accounts, are not less than six hundred rupees, and the expenditure can never be less, while the several establishments of the island are kept up.

(Signed) T. RÁMASWÁMÍ,
Jághirdár.

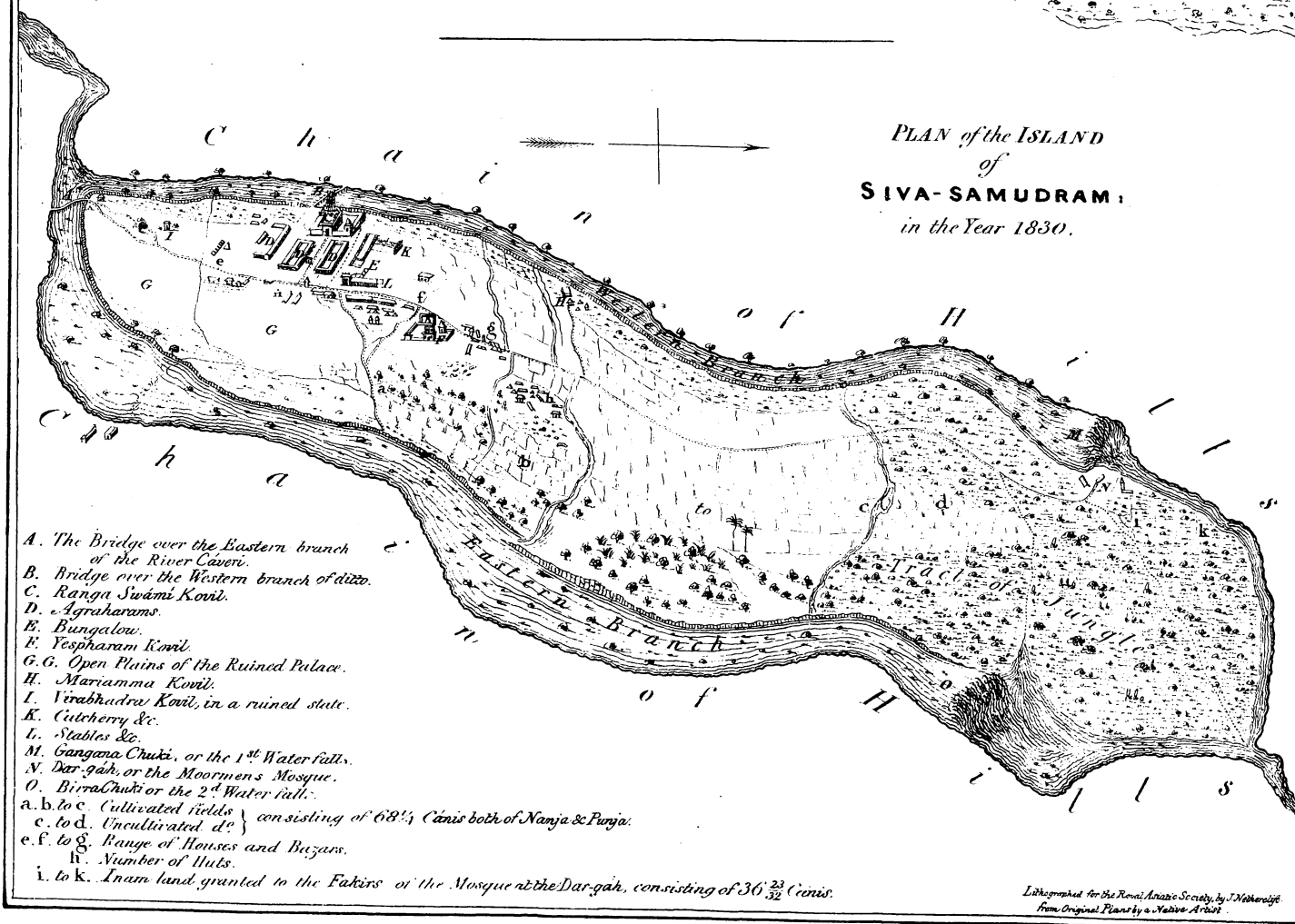
Sivasamudram, Oct. 26, 1830.

PLAN of the ISLAND
of
SIVA-SAMUDRAM:
in the Year 1818.



- A. The Pallia Kovil & a Gate.
B. Veyirl Mariatta.
C. Virabhadra Swami.
D. Ruined Castle or Palace, meas^d 576 by 288.
E. Stables d^o 576 x 204.
F. Tank, Garden, & Cindowns d^o 576 x 204.
G. Ranga Swami Kovil.
H. Yespharan d^o.
I. Mariatta d^o.
K. Daruga- or Gangana Chuki.
L. L. L. The Ramparts of the 3 Forts - & 2 Gates.
M. Birra Chuki.
N. Sangam, or the connection of the 2 Branches of the River.

PLAN of the ISLAND
of
SIVA-SAMUDRAM:
in the Year 1830.



- A. The Bridge over the Eastern branch of the River Caveri.
B. Bridge over the Western branch of ditto.
C. Ranga Swami Kovil.
D. Agraharams.
E. Bungalow.
F. Yespharam Kovil.
G. G. Open Plains of the Ruined Palace.
H. Mariamma Kovil.
I. Virabhadra Kovil, in a ruined state.
K. Cutcherry &c.
L. Stables &c.
M. Gangana Chuki, or the 1st Water fall.
N. Dar-gah, or the Moormen's Mosque.
O. Birra Chuki or the 2^d Water fall.
a. b. to c. Cultivated fields } consisting of 68¹/₂ Cenis both of Nanja & Panja.
c. to d. Uncultivated d^o.
e. f. to g. Range of Houses and Bazars.
h. Number of Huts.
i. to k. Inam land granted to the Fakirs of the Mosque at the Dar-gah, consisting of 36²³/₃₂ Cenis.

Lithographed for the Royal Asiatic Society, by J. Netheridge.
From Original Plans by a Native Artist.

XVII. *Remarks on some Inscriptions found in Lycia and Phrygia.**By Dr. G. F. GROTEFEND, F.M.R.A.S.*

Read 19th of March 1831.

FROM the little information in our possession concerning the Lycian and Phrygian language and character, it was very gratifying to find some light thrown on the subject by the discovery of certain inscriptions, for which we are indebted to Messrs. COCKERELL, CARLYLE, and Colonel LEAKE; and fac-similes of which have been published by Mr. ROBERT WALPOLE.* The valuable information which these inscriptions promised to afford for the illustration of the Archæology of Asia Minor, induced the French scholars, MM. LETRONNE and SAINT-MARTIN, to republish them in the *Journal des Savans*,† and to add many new observations upon them to those previously recorded by Mr. WALPOLE.‡ Notwithstanding, however, the numerous explanations given by these scholars of these inscriptions, which Mr. WALPOLE thought it impossible to decypher, and how far soever the perplexities of them may have been overcome, especially by M. SAINT-MARTIN, still there are many particulars which will allow of different views being entertained; and so far, therefore, it may not be altogether superfluous to submit the whole to a new and careful investigation.

As there is among the Lycian inscriptions one *Inscriptio bilinguis*, which opens the way to understand the remainder, we naturally begin with that. Not only from the resemblance of the characters, but also from the great similarity of the contents, we combine with the *Inscriptio bilinguis* (which, according to Mr. COCKERELL, was met with near the city of Phineca, among the ruins of the ancient Lycian city of Myra, on a marble sepulchre rivalling the most tasteful architecture of the Athenian master-pieces), three other inscriptions engraven on tombs of no less beauty at *Kakava*, in

* Travels in various Countries of the East, by ROBERT WALPOLE: Vol. II. 4to. London, 1820-4.

† October 1820, p. 624, and April 1821, p. 248.

‡ Travels, &c. p. 526.

the island of *Dolichiste*; and as a proof that the same characters and language were used in *Caria*, we also add a rather imperfect copy of a very mutilated inscription from among those copied there by Dr. CLARKE and Capt. BEAUFORT. To facilitate the comparison we will place the whole together, divided into separate words, marking the mutilated passages by dots.

1.	2.	3.	4.	5.
I. ....↑ΕΙΡ:	↑ΡΡΑΡΑΕΙΡ:	Μ↑ΤΕ	ΡΕΝΡΡΤΤΥ	ΣΕΔ↑ΡΕΙΑ:
II. ↑ΡΥΕ~:	ΡΙΛΑΕΥ:	ΜΥΤΕ	↑ΡΕΝΑΡΑΙΥ	Γ↑ΡΤΕΝΑΜΟΦΑΙ
III. ↑ΒΥΕ~	Β.ΡΕ~ΑΡ	ΜΥΤΑ	ΡΡΕΥΑΡΡΑΤΥ	↓ΑΟΡ~ΝΕΜΕ
IV. ↑ΒΥΕ~	ΥΟΡΥ:	ΜΥΤΕ:	ΓΡΕ~ΡΡΑΤΥ:	↑Ε↑Τ↑ΕΙΑ
V. ΑΒ.Ε....	ΡΓΨ	ΜΑΤ	ΡΡΕΥΡΡΑΤ.	ΣΕΙΡΜ

6.	7.	8.	9.	10.	11.	12.	13.
I. ~....	ΤΕΔ↑ΕΜΕ	.Ρ~Ε	↑ΤΛΕ	↑.ΒΕΝ	ΛΗΔΕ	↑+ΒΕ	Σ↑
II.		+ΡΡΓΕ			ΑΔΔΕ	↑+ΡΕ	Σ↑
III.		+ΡΡΓΕ			ΛΦΔΕ	↑+ΒΕ	Σ↑
IV.		τ.ΡΡΓΕ	Ε...Ε	Τ+ΒΕ:	Σ↑:ΛΑΔΕ:	↑+ΒΕ	Σ↑:
V. ΜΕΤ.	ΤΔΨ...ΜΕ		ΕΤΕΑ	ΕΡΛΡ	↑ΡΔ.	Ψ|||	....

14.	15.	16.
I. ΤΕΔ↑ΕΜΕ	Λ.Ε.Λ↑↑.	
II. ΤΕΔ↑ΕΜΛ.	↑+ΒΕ↑.	
III. ΤΕΔ↑ΕΜ↑	+ΒΕ↑	Υ~ΥΡ↑ΡΕΚΛΛ+↓ΞΤΑΡΡΤΑ.
IV. ΤΕΔ↑ΕΜ↑.		
V.	Λ+ΡΛ	ΛΡΔ↑ΡΔ.....

No. I. is the Lycian portion of the *Inscriptio bilinguis*, the Greek translation of which runs as follows:

ΤΟΜΝΗΜΑΤΟΑΦΑ...ΟΙΗΣΑΤΟΣΙΔΑΡΙΟΣΓΑΙΝ.ΝΙΟΣΥΙΟΣ
ΕΑΥΤΩΙΚΑΙΤΗΓΥ..ΙΚΙΚΑΙΥΙΑΙΓΥΒΙΑΛΗ.

Nos. II. III. and IV. are the three other Lycian inscriptions; and No. V. is that from *Caria*.

Notwithstanding the mutilation of this last-named inscription, and the consequent imperfection of the transcript, still the conformity of its cha-

racters to those of the others, and the similarity of its import, are manifest ; and thus, although we may be unable to explain this particular inscription itself in a satisfactory manner, the resemblance which it bears to the rest may lead to their clearer elucidation. If we deduct the characters which occur but once, and which may be mistakes of the artist, this inscription will still contain all the characters found in the others, with the exception of the single Ψ , and therefore appears to be of much the same age with them. But their antiquity must not be supposed extremely great on account of the letters and language of the Greek translation, although the Lycian alphabet dates from a period when the Greek had a χ , but hardly an η and ω ; at least there are no traces of these letters in the Lycian writing, though, as we shall soon see, it distinguished between long and short vowels, and thus enriched the Greek alphabet, which it had taken as its basis, with several vowels. That the Lycian alphabet itself was more ancient than the Greek translation above quoted, is evident, from the different forms of the S in the name SIDARIOS, which is the fifth word in the first Lycian inscription. A comparison of the p 's of the eighth word will shew, that the alphabet of the *Inscriptio bilinguis* belongs to a somewhat earlier date ; while the other inscriptions, on the contrary, as is proved especially by the first letter of the fourth word, gradually give such a form to the p , that, in the fourth inscription, this letter is written precisely as in the Greek translation. If we may rely on the copy of the Carian inscription, we there find the p formed exactly as in the Latin alphabet. Thus much, at least, appears to result from a comparison of the p 's in the several inscriptions, *viz.* that they in the order of time succeeded each other, according to the arrangement above given ; and that the Lycians not only in their writing originally took the Greek alphabet for a basis, but also altered particular characters after the Greek. Still other characters retain so very ancient a form, that we may from them infer a comparatively early origin for the Lycian alphabet.

The import of those characters which the Lycian alphabet has in common with the Greek, may be easily determined : but that of the rest can only be discovered by their being substituted for others ; for the orthography of the Lycians was so little settled, that one and the same word (as, for instance, the fourth) was not unfrequently written in forms distinctly different. But before we seek to determine the value of each separate letter, it will be advisable to explain as far as possible, with the assistance of the Greek

translation, what is the signification of each particular word. Whether the words of the Carian inscription are properly divided or not, must be left undecided, in consequence of its imperfect state. The separation of words in the other inscriptions, is for the most part determined by a colon, either in one inscription or another, or by other signs, as will appear in the course of the examination. Now, if we wish to ascertain the signification of the respective words, our first care must be to seek out the names, of which the Greek translation exhibits three. No one of these is more easily perceived than SIDARIOS in the fifth word, by which also the different names of the remaining inscriptions are given. With little more difficulty, the name of PYBIALE is discovered in the last word of the first inscription. But we are not to infer that the other inscriptions should also contain a name at this particular place. The greatest obstacle is in the decyphering of the name, which, in the Greek translation, is rendered by Παυνιος, since not only does the Greek translation present a *lacuna* in this name, but the Lycian inscription itself shews a considerable gap in that part at which the name in question should be found. Hence it has happened, that M. SAINT-MARTIN has both read the name in the Greek translation in a manner with which we cannot easily agree, and has sought for this name in a wrong part of the Lycian inscription. Taking both the *p*'s of the eighth word for two *n*'s, he finds the name Παίνις in a word which occurs in all the inscriptions; whereas it appears, on the contrary, to have stood in the mutilated spot immediately after the name of SIDARIOS.

Next to the names, there is no word of which the import is more clearly discoverable than the seventh, which in the Greek translation is rendered by υἱός. Now as this word in the fourteenth passage corresponds to the Greek υἱός, which undoubtedly signified a daughter (since υἱός would have been written for a grand-daughter), παῖς, or *child*, may be considered as its proper meaning, and it is very possible that the slightly varied termination of this word denotes the plural, *children*. We can only thus account for the circumstance, that in the fourth inscription nothing occurs after this word; whereas, both in the second and third, a word is found after it, which, according to the termination, must be an adjective belonging to it. This adjective likewise in the twelfth word appears in the singular, belonging to the eleventh word, which, following the Greek translation, must be taken to signify *woman*; for, in the fourth inscription, this word is preceded by the same two signs, which are found at the thirteenth passage before the

indication of the children, and which, according to the Greek translation, can signify nothing else than, *and*. Now, if we take the eighth word as having the same meaning with the Greek *ἑαυτῶ*, or the Latin *sibi*, then the twelfth word, which seems to be a derivative from the eighth, must signify *suus*. But the tenth word not appearing to be distinguished from this, we must of necessity take the ninth as a substantive, which, as being of no essential importance, is not only left out in the second and third inscriptions, but is also unnoticed in the Greek translations. It may perhaps signify *memory*. In the first two words, the inscriptions severally differ; the third and fourth, on the contrary, are, with the exception of the different forms of writing, the same in all the inscriptions. Hence it is probable that these two words combined express one idea, which has been rendered in the Greek translation by the reflective *ἀνεποίησατο*, as the word must probably be read. The Latin *curavit ædificandum* might be taken for those two words, inasmuch as the fourth appears to be derived from the second word of the second and third inscriptions, which would hence signify *ædificium*. For the first word, which is obliterated in the first inscription, must in the fourth signify by itself a tomb, in case no second word accompanies it.

We may perhaps, through the second word of the fourth inscription, arrive at some conclusion with regard to the family of languages to which the Lycian belongs. As the last character in this word is found at the end of the fourth word, and in the middle of the first, interchanging with an *τ*, it is probable that the sound is the same, but prolonged; and this leads us to the observation, that the Lycian writing, like the Persian, distinguished long from short vowels by different marks, the former of which might have been changed like diphthongs into different sounds; and that as the old Greek alphabet only gave marks for short vowels, new ones were invented in the Lycian for the long vowels. Thus we may in the simplest manner account for the various characters peculiar to the Lycian writings, as long vowels besides the short ones taken from the Greek alphabet. For it is manifest, from a comparison of the Lycian and Greek alphabets, that the Lycians received all the letters of the Greek alphabet for which they had corresponding sounds in their own language, and enriched them with vowels for such sounds as were not satisfactorily defined for them by those characters. If, accordingly, we read the second word of the fourth inscription *yop̄y*, we can scarcely refrain from comparing it with the word *ἰωπι*, which,

according to TZETZES,* had among the *Lycians* the same signification as δῆυρο, and may therefore probably have been used by the *Lycians* for ἐνθάδε. Consequently the Lycian language, as we find it also in the Lycian characters of Caria, would seem to be related to the Lydian; and this is all the more probable, from the fact that HOMER brings the *Lycians* into connexion with the *Trojans* in *Mysia*. Now the *Mysians*, according to HERODOTUS,† were descendants of the *Lydians*, and both were of the same family with the *Carians*,‡ with whom the *Lycians* § had many customs in common. STRABO || tells us that the *Mysian* language was a mixture of the *Lydian* and *Phrygian*; and as the *Mysians* and *Phrygians* are made *Thracian* tribes by STRABO,¶ so HERODOTUS** calls the *Armenians* descendants of the *Phrygians*.

But the Armenian language approaches in its grammatical structure more nearly to the European tongues, and especially to the Greek, than to the Aramæan, which M. SAINT-MARTIN adduces to assist in his explanation of Lycian words. The abundance of vowels in the Lycian language, is of itself an argument against a comparison of it with the Aramæan. It much rather evinces, in the few remains of it which we possess, the character of the Armenian by its impure vowels, its sibilant and aspirated sounds, and its unwieldy combination of consonants. Like the Armenian, it appears to have neither article nor gender; but, on the other hand, it distinguishes a plural with a rich declension by particular terminations, while the pronouns are individually expressed, all which is opposed to the character of the Aramæan language. What is said of the Armenian, viz. that by reason of the similarity of its composition, of its tenses, and of its use of the participles, it is best calculated for translation from the Greek, seems to apply equally to the Lycian. Thus the *Inscriptio bilinguis* displays throughout the same succession of words in Lycian and Greek, though the Latin language might perhaps have been still better calculated for the literal translation of our inscriptions. Though the *Solymians* and *Arimians* of HOMER, as all the *Cilicians*, may have belonged to the Aramæan family of languages, yet we have no reason for supposing the Aborigines of *Lycia*, whom HOMER†† places at enmity with those tribes, to have spoken any other than a branch of the Phrygian language. As the *Telchinians* were skilful workers in ore, it may be supposed that the *Phenicians*, like the Greeks, settled in the

* Ad Lycophron. v. 1232.

† VII. 74.

‡ I. 171, and Strabo XIV. 2, 23.

§ Herod. i. 173.

|| XII. 7, 3.

¶ VII. 3, 2.

** VII. 73.

†† II. vi.

southern coasts of Asia Minor; in support of which opinion, M. SAINT-MARTIN adduces divers medals with characters resembling the Phœnician, and also two verses of QUINTUS SMYRNÆUS,* in which the name of the *Phœnicians* is made to extend as far as the Lycian mountain *Massikytes*. It would however be as difficult to explain from the Aramæan all the names which we find in the inscriptions on the Caramanian shores, such as *Dae*, *Epiuasis*, *Kidamuasis*, *Kualis*, *Kuas*, *Las*, *Nineis*, *Obranguis*, *Obrangeris*, as the names and words of the Lycian inscriptions themselves. Phœnician, as well as Greek words, may have become mixed with the barbarous elements of the Lycian language; but the latter belonged (as is to be inferred from the names of places in *assus*, *essus*, or *issus*) to the widely extended Phrygian tribes, and so closely resembled the Medo-Persian language, that ALEXANDER, according to ARRIAN,† employed as an interpreter in *Bactria* and *Sogdiana*, a Lycian named PHARNUCHOS, which very name exhibits some similarity with the Persian PHARNAKES. Even the outward form of the Lycian tombs, together with the fire-worship prevailing in Lycia,‡ has reference to Persian taste, and Persian ideas of religion. We do not, however, hereby mean to contend, that a knowledge of one of the languages mentioned will be sufficient to explain the Lycian inscriptions; we should rather seek to illustrate them from their own contents.

As by a comparison of the different inscriptions we have defined the probable signification of the separate words, so must we also proceed to ascertain the import of each particular character. Let us then re-commence with the name of SIDARIOS at the fifth space of the first inscription. The fourth character in this name, and the only one not corresponding to any Greek character, seems to have had the value of an *a*; which supposition is borne out by the fact that in the Carian inscription, at the beginning of the first word, and in the middle of the third, an *a* is actually written instead of it. But as other signs also in the Lycian alphabet seem to have expressed the sound of *a* (insomuch that M. SAINT-MARTIN believes he has found no less than five different characters for *a*), while other vowels exist only in a single form, it becomes doubtful whether the Greek translation can justify us in receiving the unknown character as a secondary form of the *a*; for, as the Lycian writing uses an *e* instead of an *i*, so that the *i*, which always occurs after one, and mostly between two vowels, seems to have the

* Paralipom. Hom. viii. 106, *et seq.*

† IV. 3.

‡ See Creuzer, Symbolik und Mythologie, II. page 136, *et seq.*

value rather of the Latin consonant than the Greek vowel, the character in question may have been rendered by an *a*, only in order to produce a Greek sounding name like Σιδάριος, which PHAVORINUS explains by χαλκεύς. That the name is however really Lycian, appears from the name Σιδηροῦς, which, according to SCYLAX, is given to a cape and harbour in Lycia: and here we should observe, that in *Lycia*, as in *Caria*, the *η* was, even in CICERO's time, pronounced as it is now by the modern Greeks. At least, at the Parthian expedition of CRASSUS, according to CICERO,* the word Καυναίως, by which Carian figs were offered for sale, was spoken exactly like the Latin *Cave ne eas*. It is true that STEPHANUS writes this name Σιδαροῦς; but as he mentions a Lycian city Σιδάκη, which is said to have taken its name from the daughter of AMISODORUS; and also Σιδήνη and Σίδυμα, whose names he derives from Σίδυμος, as well as an Ionian city Σιδήλη and Σίδουσσα, together with many small towns named Σιδούς, we perceive that the name of the Pamphylian city Σίδη is the true root of all those names, notwithstanding their having received various terminations with different vowels.

With regard to the Carian inscription, we are not certain, from the imperfect state of its characters, whether the *a* is not an incorrect representation by the copyist of the character whose import we are seeking to establish, and which is in other instances also not very accurately given. In the third word, at least, this *a* corresponds to the character which we have above, in the word *yopȳ*, taken for a long *y*, but which, in the second inscription, as well as the *m* preceding it, is not clearly exhibited. According to the relation of that character to the long *i* (which would also appear to be the last character of the fourth word of the Carian inscription, if we may rely upon the transcript), we must feel all the more disposed to receive it for a long *i*; it being, in fact, nothing more than an *I* with an apex. SIDARIOS was therefore SEDÍREJA, as PYBIALE was properly PYBEALIJĪ, at least in the dative. What the sound of the third name may have been, we cannot determine, since the whole of it in the Lycian inscription is destroyed except the letters at the beginning. But the Greek inscription has also a chasm between ποιῖν and νιος, which is probably to be supplied by an *η*, inasmuch as the adjectives of the above-mentioned names of cities generally end with *ηνός*. And it is clear that the names in question must also be taken as adjectives, since the *Lycians*, as is expressly affirmed by HERODOTUS,† took their names, not from the father, but from the mother,

* De Div. II, 40; and Plin. Hist. Nat. xv, 19 (21) extr.

† I. 173.

and consequently had, in all probability, like the Etrurians, a particular form of adjective for *metronymics*. The correctness of this remark of HERODOTUS is borne out by HERACLIDES PONTIUS,* and PLUTARCH,† from which M. SAINT-MARTIN erroneously considered Παίηνιος to be the genitive of Παίηνις, the name of a father; and it is further corroborated by the fact that the god of the Lycian archers was called in preference Λητοῖδης.

Whether the name *Pæan* has any relation to the Lycian name Παίην, we must leave undecided. But the name LETO or LATONA probably originated in the designation of a woman, *lade*, as we are to read the eleventh word of the third inscription. By this word we are made acquainted with two different characters representing *a*; one of which resembles the *spiritus asper* in the Heracleian tables, and has only a slight stroke too much in the third inscription; while the other, which is always confounded with the *p* in the Carian inscription, is distinguished from the *a* merely by the want of a stroke. The first of these signs may be an *a*; but the other in all probability signified the same with the Latin *æ*; at least, a mark is added to the character which occupies the place of the *a* in the middle of the fourth word of the third inscription, which mark nowhere else occurs, and in all likelihood indicates it to be a diphthong. The termination of the first word of the bilingual inscription would therefore be *tejæ*. We find the same termination in the name in the fifth division of the fourth inscription, whilst the name corresponding thereto in the Carian inscription (the last character of which is apparently by mistake drawn to the word following next) has the same termination as the second word of the first inscription, if we may assume the central mark of the second character to have been omitted by error. Hence, the first two words of the bilingual inscription are nouns, the first being perhaps equivalent to the Greek τόδε, which must be read instead of TOAF in the Greek translation. But if the first word be a demonstrative pronoun, the second must signify *tomb*; the yet undeciphered character in this word is probably an *n*, or long *e*; for in the fourth word it stands between *pr* and *n*, and elsewhere between compound consonants; and appears to be merely a compound of two *e*'s. That the *e* was written also in the reversed form, is satisfactorily shewn by the third inscription.

We find the digamma in the fourth word exchanged for a *π*; and if we further consider that the inscription of some medals of the Cilician city

* 15.

† De Mul. virt. 9.

Nepheleis,* runs thus Ν↑Ϝ↑Λ↑ΔΔ↑, it will appear that among the *Lycians* the digamma had the sound of the Latin *f*; according to which, the second word of the bilingual inscription should be read thus: *ἱραῖαῖεῖα*. There is as much reason for comparing this word with the Greek ἱεῖον, as for comparing the first word of the other inscriptions, *ἱβῆνῆ*, to the Syriac *abana*, a tombstone. The second word of the second and third inscriptions should be read *prēnafē* rather than *baēnafē*, as M. SAINT-MARTIN reads it. At least the second inscription has clearly a Π at the beginning of the word, and the additional point, in the third inscription, probably indicates, that instead of B properly Π should be written. The succeeding letter, which in the second inscription is imperfectly written, is clearly a P, an opinion corroborated by the fact that the word is thus similar to the fourth, *prēnafūty*. If the last character but one in the second inscription be not incorrectly written, like several of the preceding ones, it must be taken as a Greek Z, and accordingly the word must be read *prēnapazy*. Now taking *prēnafē* in the sense of *ædificium* or *ædificatum*, *prēnafūty* may stand for the participle *ædificandum*, and the preceding word *mīte* or *myte* for an aorist, corresponding to the Latin *curavit*. The last word of the third inscription has a similar termination, but its commencement is as difficult to define as to decypher. M. SAINT-MARTIN reads the peculiar addition to the third inscription *anapareklé phchetafata*, without however attempting any translation of it.

According to the preceding definition, we must read the first word thus: *ἱνῆπῖρεκλε*. We cannot take the succeeding letter for Φ, especially as we have already recognized the digamma as its substitute in the medals of *Nepheleis*. If we determine the signification of the character by its form, it can be nothing else than Ξ, which those who find *Xchētafata* too difficult to pronounce, may draw to the foregoing word. Although this is almost the only case in which a word of the Lycian inscriptions terminates with a consonant, yet the whole addition may perhaps be explained as an incantation, if we can compare *chētafata* with the Milesian term of magic, *Chthyptes*. The *Telchinians*, with whom LYCUS† built the temple to APOLLO near the *Xanthus*, are called magicians by the Greek grammarians, and the name of *Telmissus* (whose astrologers we are told‡ were consulted by CRÆSUS), seems to signify “a city of Talismans.” We further

* Mionnet, Descr. de Méd. Antiq. t. iii. p. 596.

† Diodor. v. 56.

‡ Herod. i. 78.

know,* that the *Milesians* honoured the Lycian APOLLO, as the *Ephesians* did the Persian ARTEMIS; and, according to EUSTATHIUS,† the coronet, the girdle, and the feet of the Ephesian ARTEMIS, bore certain words to which was ascribed a magic power of delivering from imminent danger. HESYCHIUS says that these words were Ἀσκιον, Κατάσκιον, Λιξ, Τετραξ, Δαίμονα μινεύς, Αἴσιον, and signified *darkness, light, earth, year, sun, and truth*. The *Milesia grammata*, which differed from these, were Βέδυ, Ζαῖψ, Χθών, Πλῆκτρον, Σφιγξ, Κνάξζβι, Χθύπτης, Φλεγμὸς, Δρωῖψ; among which *Bedy* is expressly stated by CLEMENS ALEXANDRINUS‡ to be a Phrygian word, signifying, according to some, *water*; and to others, *air*. From the Persian *bad*, the latter interpretation is the most probable, especially as PLATO, in *Cratylus*, says that the Greek words ὕδωρ and πῦρ are Phrygian. According to that example, we may consider, if not the Ephesian, yet at least the Milesian incantatory words as Phrygian, and thus compare the Lycian *Chētafæta* with χθύπτης.

Although we might take χθών for *earth* or *netherworld*; πλῆκτρον for something to strike with; σφιγξ for an oppressive being; φλεγμὸς for warming blood; and even δρωῖψ for an extraction of noxious humours from the body, still κνάξζβι and χθύπτης sound too strangely not to lead us also to refer ζαῖψ rather to the Persian *shæb*, “night;” which in Zend is pronounced *Qsaps*, than to receive it as a Greek designation of a tempest at sea. But if κνάξζβι was a Phrygian word, it cannot appear singular in the Lycian, if we read the twelfth word *ixbe*. The tenth word is not very different from this; indeed, in the fourth inscription, it is precisely the same, with the exception of the first letter: in the fifteenth word, however, the termination *iz* is added, which seemingly indicates a plural, since the preceding word, which in the first inscription is in both cases *tellēme*, in the remaining inscription has taken the final letter *z*. The Carian inscription will therefore, if not in the eleventh, at all events in the sixteenth word, relate to several women. But the whole inscription is so imperfectly copied, that it is impossible to decide, with respect to the seventh word, whether the character peculiar to it be an *z*. Now, though the seventh word rather signifies *child* than *son*, yet its plural in the fourteenth word denotes the daughters rather than the children generally; for NICOLAUS DAMASCENUS § expressly says, Λύκιοι τὰς γυναῖκας μᾶλλον ἢ τοὺς ἀνδρας τιμῶσι καὶ καλοῦνται μητρόθεν, τὰς τε κληρονομίας ταῖς θυγατράσι λείπουσιν, οὐ τοῖς υἱοῖς.

* Tacit. Ann. iv. 55.

† On Odys. xix. 247.

‡ Strom. v. p. 568.

§ Stobæus, p. 292, 23.

The last character in the fourteenth word is not perfectly marked in the second inscription, while in the third it is entirely omitted, and the character occupying its place seemingly belongs to the following word. Unless, by an oversight, one of the two similar characters has been here omitted, we might explain that which occurs at the end of the fourteenth word in the second inscription as being a sort of apostrophe. The character at the beginning of the fifteenth word, as well as of the tenth and the twelfth, is however, like the ϵ in the Greek $\epsilon\delta\varsigma$ and $\epsilon\mu\omicron\varsigma$, to be considered as a prosthesis or a metathesis, since the possessive pronoun is to be derived from the personal pronoun *chæppe* (*sibi*), in the eighth word. Whether, in the ninth word of the fourth inscription, the digamma be only incorrectly written, or another word, as in the first inscription, be signified thereby, it is impossible to say, on account of the mutilated state of the following characters.

The whole of the inscriptions, with the exception of the most difficult, the Carian, are therefore to be read and translated as follows :

I. ... <i>īejæ.</i>	<i>iræfæejæ.</i>	<i>mīte.</i>	<i>prenæfātȳ.</i>	<i>Sedireja.</i>	<i>P.....</i>	<i>tedieme.</i>
Hoc.	monumentum.	curavit.	ædificandum.	Sidarius.	Pænenius.	filius.
<i>chæppe.</i>	<i>ītte.</i>	<i>īchben.</i>	<i>lāde.</i>	<i>ichbe.</i>	<i>sī.</i>	<i>tedieme.</i>
sibi.	memoriæ.	suæ.	uxori.	suæ.	et.	filiae.
Pybealijī.						Pybialæ.
II. <i>Ibȳēnȳ.</i>	<i>prēnæfæ.</i>	<i>mīte.</i>	<i>prēnapazȳ.</i>	<i>Partenamofaj.</i>		
Sepulcrale.	ædificium.	curavit.	ædificandum.	Parthenamofæus.		
<i>chæppe.</i>	<i>lade.</i>	<i>īchbe.</i>	<i>sī.</i>	<i>tediemī.</i>	<i>īchbejī.</i>	
sibi.	uxori.	suæ.	et.	filiabus.	suis.	
III. <i>Ibȳēnȳ.</i>	<i>brēnæfæ.</i>	<i>mȳte.</i>	<i>prēnaifātȳ.</i>	<i>Chaofeneme.</i>		
Sepulcrale.	ædificium.	curavit.	ædificandum.	Chaofenemus.		
<i>chæppe.</i>	<i>lāde.</i>	<i>īchbe.</i>	<i>sī.</i>	<i>tediemī.</i>	<i>īchbe</i>	<i>Ynypēreklex. chētafæta.*</i>
sibi.	uxori.	suæ.	et.	filiabus.	suis.	
IV. <i>Ibȳēnȳ.</i>	<i>yopȳ.</i>	<i>myte.</i>	<i>prēnæfætȳ.</i>	<i>Iēitiejæ.</i>		
Sepulcrum.	hīc.	curavit.	ædificandum.	Ietieus (Eētion).		
<i>chæppe.</i>	<i>f...e.</i>	<i>īchbe.</i>	<i>si.</i>	<i>lāde.</i>	<i>ichbe.</i>	<i>si.</i>
sibi.	memoriæ.	suæ.	et.	uxori.	suæ.	et.
						filiabus.

That the Carian inscription is written in the Lycian, and not in the Carian language, appears deducible from the fact that, according to STEPHANUS,† a grave was called in Carian $\Sigma\omicron\upsilon\tilde{\alpha}$, and that $\Gamma\acute{\epsilon}\lambda\alpha$ signified a king.

But it is now time to pass on to the two Phrygian inscriptions found by Colonel LEAKE on a tomb, which is cut in a rock in the Phrygian valley of *Doganlu*, near the borders of *Bithynia* and *Lydia*, the form being that of a palace with a very small entrance. The two inscriptions belong, as is proved

* Cf. Pers. Sat. I. 112.

† De Urbibus, s. v. $\Sigma\omicron\upsilon\acute{\alpha}\gamma\epsilon\lambda\alpha$.

by the identity of their final words, to one language and character, but were cut at very different periods, as we infer from the rounded form of the A and D in the more modern inscription. The oldest inscription, which is above the gable roof to the right, and like it, slants upwards, is as follows:

IAFFAFAKÆYANOΓAFOS: MIDAI: LAFAGTAEI: FANAKTEI:
EDAE.

The more modern inscription, which is cut in a line downwards on the left side of the monument, runs thus:

BABA: MEMEFAIS: PROITAFOS: KPHIZANAFEZOS: SIKEMEMAN:
EDAES:

Besides these, HAMILTON has given the following fragment of an inscription as an Appendix to his *Aegyptiaca*. It is deserving of a place here, on account of the resemblance of the language and writing to the foregoing.

AS: TYAY.....ENIS: AE: ESYRGOSOSI: TIN:

The great similarity of the characters to the Greek, leaves no great doubt as to the way of reading them; yet the twelfth character of the first inscription, if judged by the middle character of the fourth word of the second, would seem to be rather an N, like the tenth character, than an R, for which M. SAINT-MARTIN has taken it. In Latin letters, the inscriptions run thus:

1. IAEFAFAKENANOGAFOS. MIDAI. LAFAGTAEI. FANAKTEI. EDAE.
2. BABA. MEMEFAIS. PROITAFOS. KPHIZANAFEZOS. SIKEMEMAN. EDAES.
3. AS. TYAY.....ENIS. AE. ESYRGOSOSI. TIN.

In the first inscription, the words *Μιδαι Φανακται* are too clearly similar to the Greek *Μίδας Φάνακτι*, not to induce a belief that the inscription relates to the king MIDAS, or a king of the Gordian dynasty, which ruled in *Phrygia* between 740 and 570 A.C. If so, *Lafagtaei*, which divides those words, would be a surname of that king in the dative case, to distinguish him from another MIDAS; and what stands before the name *Midai* would then denote him who founded the monument. The last word *edae* is then a verb, as is the last word of the second inscription *edaes*: yet, whether both words are alike, or whether the shorter is the singular, and the longer the plural, cannot be determined by a comparison with Greek words, as *ἑδάϊξε* and *ἑδάϊξαν*, as little suited by signification as by form to the Phrygian inscriptions, but it can only be decided according to the number of the subjects. If *os* be regarded as the termination of the subject, we find it only once in the first

inscription; in the second, on the contrary, twice, to which may be added also the termination *is* in *Memefais*. But whether the different subjects be names of persons or indications of rank, is not perfectly clear; and it is also difficult to ascertain how the first word of the first inscription (which we must consider as one compounded from several, because at the beginning of it, according to the traces on the monument, there must be something wanting), is to be reduced to its simple elements. As an accusative is wanting in the first inscription, which in the second seems to be indicated by *Sikememan*, after *iaefafaken* a distinction might be made, so that *Anogafos* would remain as the proper subject of the first inscription. Let us compare the beginning of the first inscription...*iaefafaken* with the similarly mutilated commencement of the first Lycian inscription *īejæ iræfæējæ*, and further take into consideration that this word might also have been pronounced thus, *īæfæeejæ*; and that in the Phrygian language, as is clear from a comparison of the word *Φαννακτεῖ* with *ΛαΦαγταεῖ*, the F has also the value of a digamma, and soft letters are likewise hardened; we shall then be inclined to conjecture that the sense of the inscription is: "This monument ANOGAVUS consecrated to king MIDAS *Lavagtaes*."

What this last word signified, and whether the first letter of the same be rightly interpreted or not, must be left for others to decide. But *edae* may be compared with the Greek *ἔδωκε*, or the Latin *dedit*, particularly as also in Armenian *dam* still signifies, "I give."

The second inscription is more difficult, yet the word *kphizanafexos* may perhaps be divided into *κφίζαν* and *ἄφεζος*, and the first of these considered as the accusative of the Carian word *γίσσα* or *μεγίσσα*, which, according to STEPHANUS,* signified a stone. In this case the sense might be, that *Baba Memefais Proitafos* had given the stone, and *Afexos* the expenses of the workmanship (*Sikememan*). But it will still remain uncertain whether *Afexos* was the name of a man or of a place. The latter is likely, if by *Baba Memefais Proitafos* any dignity is designated. STRABO † names a district *Ἀβασίτις* in this part. Although ATHENÆUS ‡ mentions *Babys* among other Phrygian names, yet *Baba* in so many languages signifies *father*, that we may even here imagine a kind of Phrygian nobility, especially as *προίταφος* seems so similar to the Greek *πρώτος* or *πρύτανις*, though HOMER § names a noble Lycian PRYTANIS. What *Memefais* means,

* De Urbibus, s. v. *Μονόγισσα*.

† XII. 5, 11.

‡ XIV. 18.

§ II. v. 678.

however, it is difficult to say, unless a portion of the first part of the word stands in relation to the latter part of the word *Sikememan*, which possibly signifies the expenses or charges. The passage might therefore be thus translated: "The superintendent of the payments, PROETAVUS, gave the stone; ABASIS the charges of the workmanship." Uncertain as all this may still remain, thus much is clear, that the monument is much more modern than the period about which king MIDAS lived, by whom we may reasonably understand the old king MIDAS, whose memory it was wished to preserve even in later times. If we may compare the Armenian with the Phrygian, it would perhaps be more correct to read *gafagtaei* than *lafagtaei*, by which, according to the Armenian *khaghakh* (city) might be meant the founder of a city. From all these remarks it results, that the Phrygian language is the intermediate link in the family of Indo-Germanic tongues, its words and inflections bordering as closely on the Greek, as the written characters are manifestly Grecian. This is further corroborated by the near relationship of the *Phrygians* with the *Thracians*, from whom proceeded the original cultivation of *Greece*. The *Etruscans*, on the contrary, who are usually derived from *Lydia*, have nothing in common with the *Phrygians* either in language or writing:

XVIII. *Account of a Flag representing the Introduction of the Caste of Chalias or Cinnamon-peelers, into Ceylon. By Sir ALEXANDER JOHNSTON, Vice-President R.A.S., F.R.S.*

To GRAVES C. HAUGHTON, Esq. M.A., F.R.S., *Honorary Secretary to the Royal Asiatic Society.*

SIR:

I beg leave to send you an account of the painting upon cloth which I presented to the Society some time ago,* and which is a *fac-simile* of a very ancient banner of the caste of *Chalias*, or cinnamon-peelers, on the island of Ceylon.

The present numbers and importance of these people, render their history a subject of curious research. As the Cingalese inhabitants of Ceylon were, previous to the thirteenth century, ignorant of the art of weaving fine cloth, which was then known to the Hindu inhabitants of the peninsula of India, the kings of Kandy offered great rewards to any of their subjects who would bring over from the peninsula some weavers for the purpose of introducing that art into Ceylon.

Early in the thirteenth century, a Mahommedan merchant of Barbareen, a port between Colombo and Point de Galle, on the south-west coast of the island, induced by the offer, brought over eight weavers from the peninsula in one of his trading vessels, and landed them at Barbareen. On their arrival, the then king of Kandy received them with great kindness, had them married to women of distinction, gave them houses and lands, established a manufactory for them in the vicinity of his palace, and conferred the highest honours upon their chief.

The descendants of these persons, who were called by the other natives of the country *Chalias*, having in the course of two centuries become numerous and powerful, excited the jealousy of the Kandian government, and were compelled by the king of the country, as a punishment for some alleged

* This painting was presented to the Society at the general meeting on the 17th of November 1827. A reduced *fac-simile* of it in lithography was delivered with the 1st Part of the 3d volume of the *Transactions*.

offence against his authority, to quit the interior, and settle near the south-west coast of the island, in the district where cinnamon grows to perfection ; and there, as the condition upon which they were allowed some government lands, to peel and prepare for the government, without pay, as much cinnamon annually as it might require.

The kings of Kandy, so long as they retained the sovereignty of the country, exacted rigidly this severe duty from the *Chalias*: the Portuguese, Dutch, and British Governments, as they severally succeeded to that sovereignty, continued to require the same duty from them. In 1809, on being appointed Chief Justice and President of his Majesty's Council on Ceylon, I felt it to be my duty to point out to the late Marquis of Londonderry, the then Secretary of State for the Colonies, the injustice and impolicy of this system ; and urged his Lordship to instruct the local Government of Ceylon, instead of exacting forced labour from the *Chalias*, to pay them as they did other free labourers for their labour. Lord Londonderry agreed perfectly with me upon the subject, but his resignation of office shortly after, prevented him from carrying my proposal into effect. Lately, however, in consequence of a representation from the Commissioners of Inquiry, his Majesty has made an Order in Council, prohibiting the local Government of Ceylon from exacting forced labour from the *Chalias*, and directing it to pay them as other free labourers are paid, for any service which the Government may require from them.

This painting on cloth forms part of a collection which I made while I was on Ceylon, of historical materials for illustrating the history of the different castes, and of the different arts which prevail amongst the natives of the island. RÁJÁ PAXIE, the late *Mudeliar*, or native chief of the *Chalias*, who was one of the best-informed men in Ceylon, and who gave me the painting, told me that he believed the original to be the most ancient painting in the island, and to represent the three following events which occurred on the arrival of the eight weavers, the ancestors of the *Chalias*, on Ceylon. The first, that of one of the eight having been killed with an arrow by a soldier of the king of Kandy as he was in the act of jumping out of the vessel into the sea to make his escape, in consequence of his being panic-struck at the novel appearance of the Cingalese inhabitants of the island, who were standing on the beach. The second, that of the peculiar manner in which the seven remaining weavers were, as a mark of respect, brought on shore, according to the custom of the country, upon

the backs of the sailors ; and the third, that of the public procession which took place when the king of Kandy conferred upon the chief of the weavers some houses, lands, and a manufactory for the use of himself and his countrymen in the neighbourhood of the royal palace ; and the honours of wearing a gold chain, travelling in a palanqueen, and having an umbrella and a *talpát* leaf carried over his head whenever he appeared in public.

Such a painting is an object of curiosity to the orientalist, because it shews him the state of the art of painting amongst the Cingalese in the thirteenth century ; the manner in which they availed themselves of that art in recording events of importance to their country and to their caste ; the form and rigging of the vessels which were built by the natives of India in a remote age ; the time at which, the country from whence, and the persons by whom, the ancestors of the *Chalias* and the art of weaving fine cloth were introduced into Ceylon ; the importance attached to this event by the kings of Kandy ; the ceremonies which were observed by them in granting honours and distinctions to any of their subjects ; and the costume worn at that period by natives of different castes at all public processions.

I have the honour to be,

SIR,

Your most obedient and faithful servant,

ALEXANDER JOHNSTON.

XIX. *On the Jainas of Gujerat and Márwár.*—PART I. *By Lieut.-Colonel WILLIAM MILES.*

(Communicated by the BOMBAY BRANCH of the ROYAL ASIATIC SOCIETY.)

Read 7th of January 1832.

THE following extract from a Persian work, entitled the *Mirdt i Ahmadi*, part of which is devoted to a description of the religion and customs of the Jainas, appearing to me a compendious (although in some points a rather inaccurate) account of that people, I have taken the liberty to prefix it, by way of introduction, to my own paper.

Of the *Séwrás*, *Jatís*, or Priests of the Jainas.

The *Séwrás*, also called *Jatís* (Sans. *Yatís*), are a body of holy mendicants, who live in celibacy, and in general employ their leisure time in the cultivation of the sciences of medicine, astrology, and divinity.

With the exception of the sect called *D'hond'hiás*, who do not worship images, they worship the figure of *PÁRS'WANÁT'HA*; their abstinence is extremely austere, some, at a particular period called *Pajusan* (?), fasting forty days.

During the four rainy months they remain in one place, their head priests selecting particular towns and villages for their residence during that period.

The first principle of their religion is the preservation of animal life; and with a view to its more strict observance, they go bare-footed. Some wear cloths over their mouths, that the heat of the breath may not injure such insects as are too minute to be seen or avoided.

They consider the digging of tanks, wells, and gardens as a crime, because many insects are thereby destroyed. They will not light a lamp or a fire, cook their victuals, or draw water from a well during the night. They subsist on bread and water, which they collect from the houses of their followers, the *Srávaca-vanyas*. Some make a vow to beg their sub-

sistence from only one or two particular houses, and even then under certain restrictions; as,—1st. If the door be open; for if it is shut, they will not knock, as by that means they might injure animal life, and the sin consequently fall to their account;—2d. On entering a house they observe how much food has been prepared, and the number of persons to partake of it, and only accept of a proportionately small quantity, that the people of the house may not have to cook again: if more be offered they refuse it;—3d. If there be a marriage, or the cause of mourning in the house, they will not approach it;—4th. If they should not be able to procure food in the houses from which they have predetermined to beg, they pass the day and night fasting.

The followers or disciples of the *Séwíás* do not eat or drink at night; and if any prepared food remains after their meals, they immediately dispose of it.

They consider it meritorious to abstain from fruits or vegetables—as greens, the fruit of the egg-plant, yams, cucumbers, potatoes, &c.—it being their opinion that all these are endued with life like animal nature.

They wear no clothes, except a small cloth for the sake of decency, and a sheet, which covers them all over. They invariably carry with them a broom, made of a fine kind of wool, to sweep the places on which they are about to sit, in order that no injury may result to insects.

They do not allow the creation of the world; and the learned among them say, that as grass springs up from the earth of itself, no one sowing it, even so the production of life is spontaneous, and by the course of nature from eternity. They do not admit any future state of punishment, but say that man is formed by the junction of the four elements, which after death all separate, and return to their original form and state. As nothing, therefore, remains to be punished, they do not agree with the preparation of the *śrádd'ha*, or food offered to the souls of their ancestors, by the *Mahéśwarís* or *Hindús*; for they say that after a lamp is extinguished, it is of no use to pour oil into it.

They esteem it a sin to shave or cut their hair, but conceive it very meritorious to pluck it out by the roots. Their chief penance is to abstain from bathing or washing themselves, contrary to the practice of the *Bráhmans* and *Mahéśwarís*, who bathe at the least twice a day.

The *Séwíás* purchase boys, and sometimes receive volunteers into their

order; they teach them their learning, and appoint the most able to succeed them.

The *Mahéswarís*, who are the followers of the Bráhmans, despise the *Séwrás*, and consider it contamination to associate or even converse with them. They say, that if on one side of the road there be a mad elephant, and on the other the *parsál* or house of a *Séwrá*, it is better to face the elephant than to enter the house.

The Jains say, that the original founder of their religion was GAUTAMA, one of the seven *Rishis* or Saints, who for some cause, the detail of which is too long for insertion here, was born in the Bráhman caste or tribe.

Men of every caste and class may be received among the *Séwrás*, in opposition to the Bráhmans, who admit no one into their order.

The *Séwrás* are divided into eighty-four *Guchch'has* or sects.

Of the *Srávacas*.

The *Srávacas* are a people derived from different tribes of Hindús, and dispersed throughout all the towns and cities of Hind.

The chief of these are two tribes, the *O'sawál* and *Srímáli*; these are considered perfect, as there is no mixture of persons professing the *Mahéswari* or Hindú faith in them (this I believe is a mistake as far as regards the *Srímális*). In the *Poréwál* tribe there are both Hindús and Jains, and for this reason they, with the *O'sawáls* and *Srímális*, are called the *Ar'hái* ($2\frac{1}{2}$) tribes of *Srávacas*. The *O'sawáls* were originally inhabitants of the town of O'sawár, in Márwár', and the greater part of them are descended from Rájpúts, but are called *Vanyas*, from their having become the disciples or followers of the *Séwrás*.

The cause and mode of their conversion to the Jaina religion is differently related; the account however which the writer of this history received from RATTAN SINHA BANDHÁRI (the *Náib* of MAHÁ RÁJÁ ABHEY SINHA, Súbá of Gujerat), and who was himself a Chóhán Rájpút,* is as follows:

In former times a *Séwrá* travelling in Márwár' arrived at a village the inhabitants of which were all Rájpúts, and as he could not obtain charity from them, he was obliged to fast all night. It happened that during the night the son of the chief of the village was bitten by a snake, and died in consequence, and, as is customary in India, great lamentation was made for

* It is more probable that his ancestors were Rájpúts, as he himself was a *Vanya*.

him. The *Séwrá*, having ascertained the cause of the mourning, considered that if any of his religion came to the town hereafter, they would be obliged to fast as he had done, and it was therefore desirable that the inhabitants should become *S'rāvacas*; to accomplish which, being well versed in the magic art, he informed the chief that if he would be converted to his faith, he would restore his son to life. After some hesitation this condition was agreed to, and the *Séwrá* having performed his part of the contract, the chief became a *S'rāvaca*, together with the whole of the inhabitants of his village.

It is well known that any person of the *Vanya* caste may be admitted a proselyte to the Jaina faith.

The above account is followed by a description of the Jaina temples and *śrēṭhās* in Gujerat, which, as they are tolerably well known, I have omitted.

In addition to this account of the Jainas, by the author of the *Mirdt i Ahmadi*, it may be useful to state, as a summary of their principal religious tenets :

1st. That they believe in the metempsychosis, and are taught to consider the preservation of the six *Cai*, or *Cāya*, (*i. e.* classes or orders of beings,) as the first principle of religion. According to them, these (namely, the four elements, vegetable and animal nature,) are all endowed with life.

2d. They believe in the eternity of the world, and that the only changes to which it is subject are those consequent on the revolution of the cycle, called the *Sarpiṇi* and *Utsarpiṇi Cāla*.

3d. That life revolves through the five *Gati* or mutations of existence to eternity.*—These changes are,

1st. *Tiryanch*, the elements, vegetation, and animals.

2d. *Naraci*, or the inhabitants of the infernal regions.

3d. *Manushya*, or mankind.

4th. The *Dévatás*, angels or inferior deities, all of whom possess from one to five senses.†

5th. The *Sidd'ha*, or Supreme God; beyond this there is no change.

It may be proper to remark here, that the two first are considered as states of punishment awarded in retribution for evil deeds.

* *Omnia mutantur nihil interit, errat et illinc huc venit hinc illuc, &c.*

† These will be more fully explained hereafter by an extract from a Jaina work treating of the *Sarīras*, senses and properties of the different orders of beings, and their transmigrations.

Of the five *Gati*, or migrations of life, those only are to be revered or worshipped who, being of the third, attain either of the five following grades of religious rank; namely, the *Arhanta*, *Siddha*, *Airyánam* (*Aryamá?*), *Upádhyaya*, and *Sádhu*.

4th. Life pervades every particle of the universe; these are all included in the general terms *St'hávára* and *Jangama*, which I believe signify bodies endued with faculty of motion and those without it. All bodies possess (*Chétana*) the sense of feeling or perception.

5th. It is their opinion that any man by religious austerities and the practice of virtue may be united to the *Siddha*, or become himself a similar *Siddha*.

The deified *Rájás* or *Tírt'hancaras*, and *Sámán्या Caivalyas* or saints, have all become *Siddhas* from the merit of their actions and *tapasyá*.

6th. Of all the orders of beings in the universe, man alone can attain immortality. The *Siddha* only is immortal; the existence of even the deities being limited, and subject to the laws of *carma*, the metempsychosis, &c.

7th. In opposition to the *Násticas* or immaterialists, and the *Criya-vádís* or those who believe in the creation of the world, they denominate themselves *Carma-vádi*.

They say that the *Siddha* is too exalted or remote to take any account of the actions of men—that he neither made the world, nor does he interest himself or interfere in its concerns. According to their tenets, the chief controlling power in all regarding sentient beings is *Carma*. This word is derived from the Sanscrit, and signifies an action, but, in their acceptation, it is understood to mean worthy and unworthy actions, and their retributive effect on the agent, in producing the happiness or misery which he experiences in the different passages or revolutions of his existence. On this ground they even proceed so far as to point out the particular evils or benefits resulting from a given act, both in the present life and in future births.

It is to be remarked here, that the eight *carma** or evil accidents of nature, which are stated to be, 1. Ignorance; 2. Infidelity and the pas-

* 1. *Jñ'yánávaran'íya carma*.
2. *Móhaniya* do.
3. *Dars'anávaran'íya* do.
4. *Antaráya* do.

5. *Védaníya carma*.
6. *A'yu* do.
7. *Náma* do.
8. *Gótra* do.

sions; 3. Blindness or want of perception of what is right, inconstancy, or irresolution; 4. The vicissitudes of fortune, and neglect of religious duties; 5. Happiness or misery; 6. Duration of life; 7. Name or repute, good and bad; 8. Family condition or rank—all impede the progress of the soul to immortality, which can only be attained by their destruction. The four first of these are called *Gati carma*, and the annihilation of these ensures the attainment of *cévalajñyána*, or universal knowledge; the first and greatest step to *mócsha*.

8th. Although the Jainas maintain the supremacy of *carma* in the control of the happiness and misery of life, yet they acknowledge the influence of four other principles or original causes, the explanation of which shall be given as nearly as possible in their own words.

They maintain that there are five *cáraña*, or causes, which unite in the production of all events.

The 1st of these is *Cála* or time.

2d. *Swabháva* or nature.

3d. *Nínt*, or *Bhavité víta*, fate, necessity.

4th. *Carma*, works or the principle of retributive justice.

5th. *Udyama*, strength and exertion of mind, or perseverance.

They say that the learned were originally divided into five schools or sects, bearing the above titles, as *Cála-vádi*, *Swabháva-vádi*, &c., each of which maintained the supremacy of its favourite cause or principle; those of the first referring to the evident effects of time in the production and reproduction of all things.

The second holding that the world and all it contains is derived solely from nature.

The third, or those who adopted fate as their principle, maintaining that neither time nor nature have any control whatever in the occurrence of events, all being pre-ordained from eternity and immutable, and that no efforts can avert the decrees of fate.

The fourth, or those who considered retributive justice as supreme, say that life revolves eternally through the four orders of beings before described, and that its transmigrations will be high or low, evil or good, in proportion to the worthiness or unworthiness of its actions; that life wanders through all the mutations of existence in conjunction with the eight *carma*, between which and the soul there is a secret but almost indissoluble connexion; and by their operation the most exalted being, as the *Chacravartís*, may be

degraded to the infernal regions; and the *dévatás*, or divinities, become animals, insects, or even particles of matter; that this is effected by *carma*, to which all but the immortal *Sidd'ha* are subject.

The fifth sect are those who refer all to energy of mind.

The advocates for the supremacy of this faculty as influencing the condition of mankind, say that all motion and exertion, the *asi*, *mási*, and *crishi*,* or, the arts of civilized life, all result from the strength of the mind : there is therefore, they say, no necessity for the intervention of the deity, time, *carma*, &c.

It is related that the supporters of these doctrines all came before the *Jinéswara* or *Tírt'hancara* of the age, and after respectively stating their arguments in support of their favourite principle, requested him to decide on their validity.

The *Jinéswara*, after hearing all they had to say, desired them to forego their prejudices, and exert their understanding : he then explained to them that neither of these principles can do any thing of itself; but as the five fingers perform the work of the hand, so do these unite in the completion or perfection of all events, and that their influence may be traced in the production of every thing existing.

This is the Jaina opinion on the subject.

Although the change of the seasons and operations of the elements proceed from *Swabháva*, or nature, yet they are considered partially under the control of the *Indras* and inferior divinities (the Hindú gods are said to be of this number), and some Jainas worship these inferior gods and goddesses.

In the six *árás* of the *Sarpinícála*, and the same in those of the *utsarpiní*, or *avasarpinícála*, there are invariably produced twenty-four *Tírt'hancaras*, twelve *Chacravartís*, nine *Bala-dévas*, and nine *Vásudévas*.

These fifty-four personages, who are *Rájás* and mostly great conquerors, are denominated the *Uttama-púrusha*, or most excellent of men.

Some sects join to these the nine *Prati Vásu-dévas*, or *Rájás*, who were subdued by the *Vásu-dévas* : this, however, is not authorized by the *Sidd'hantas*.

The *Tírt'hancara* is a *Rájá*, who by his piety and virtues attains *mócsha*, and becomes a *Sidd'ha*, or Supreme God.

* Husbandry, commerce, and war.

The *Chacravartís* are supposed to have reigned over all the six *c'handas* of *Bharata Cshétra*—that is, from the *Lavana Samudra*, or salt sea, to the range of mountains called *Himdván*.

Three of these *Chacravartís* were *Tírt'hancaras*; viz. *S'ÁNTÍ NÁT'HA*, *CUNT'HU NÁT'HA*, and *ARA NÁT'HA*.

The nine *Bala-dévas* and *Vásu-dévas* were half-brothers. They are supposed to have possessed only half the extent of territory conquered by the *Chacravartís*, or three *c'handas* of *Bharata Cshétra*, or from the sea to the *Vitál Parvat*, or silver mountains.

The *Bala-dévas*, although the elder brethren of the *Vásu-dévas*, were not warriors, but ascetics, who from their mild and virtuous lives attained *mucti*. The *Vásu-dévas*, from the sin incurred in their bloody wars, invariably go to the infernal regions.

Lists of these, with the *Prati Vásu-dévas*, will be found in Mr. Colebrooke's "Observations on the Jains."*

They believe that the world, from the first *árá* of the *sarpińícála* to the third, was peopled by a race of men of immense stature and incredible longevity, called *Yugalas* (from their being born, living, and dying in pairs); that they were devoid of the baser passions, and that all necessary articles of subsistence, clothing, &c. were furnished to them by the spontaneous productions of ten trees, denominated the *Calpavricsha*.

It unfortunately happens, however, that the third *árá* of the *sarpińícála* is the limit of this golden age, and that at that period the productions of these trees invariably fail in *Bharata Cshétra* (*Hindústán* and the adjoining countries); a *Jinés'wara*, therefore, appears at that time to teach the *Yugalas* the arts of civilized life, as *RISHABHADÉVA* the first *Tírt'hancara*.

This is the same in all revolutions of the *Cála-chakra*, or cycle.

The *Yugalas* are said still to inhabit the parts of the earth named by the Jains *Mahávidéhá-cshétra*, *Dévácuru*, *Uttaracuru*, *Rómaca*, *Vásu*, and *Hiranmaya*.

The Jains believe that there will be a general (some say only a partial) destruction of *Bharata-cshétra* by fire from heaven, and other calamities, at the end of the sixth or last *árá* of the *sarpińícála*, but that all will be gradually renovated and restored at the commencement of the *Avasar-pińícála*.

* Asiatic Researches, vol. ix. p. 287.

Of the Scriptures of the Jainas.

The *Sútras*, or holy books of the *Jainas*, are by some sects held to be forty-five in number ; by others, thirty-two ; and by some, as the *Digambaras*, only ten.

The principles treated of in them are classed by their learned men under four general heads :

1st. *Daivánuyóga*.—This comprehends six divisions or subjects :

1. *Dharmásticáya* of motion.
2. *Adharmásticáya* of rest.
3. *A'cásásticáya* of vacuum.
4. Of *Cála* or time.
5. Of *Jíva* or life.
6. Of *Pudgalásticáya* or matter.

2d. *Charaṇánuyóga*.—This division treats of the duties of *sát'hus*, the rules of the ascetic life, and of the fourteen *Gun'ast'hánaca*, or steps, to the attainment of *mócsha*.

3d. *Caraṇánuyóga*.—Cosmography, or of the fourteen *Rájálóca*, and the form of the universe.

4th. *Dharmácat'hánuyóga*.—Histories of the saints.

In concluding this summary, it may be proper to observe, that the Jainas hold all kinds of self-immolation, as *satís*, &c., in abhorrence, with the exception of *anaśana* (*i. e.* fasting to death), as a penance, or *tapasyá*. This is considered very meritorious, and, I believe, as indispensable in the attainment of *mócsha*.

N.B. An endeavour has been made to restore the proper names throughout Colonel MILES's paper to their original Sanscrit forms ; but in some cases this has not been possible, partly owing to the obscurity of the terms, and often to the designations existing only in the popular languages.—G. C. H.

PART II.

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PART II.

THE Jaina religion appears to flourish in Gujerat, Már'wár', &c. The great majority of the *vanya* class, the most wealthy of the community, are *S'rávacas*. With regard to its earlier history, but little can be said; the *Patávalis* of the Jainas, or the lists of the succession of their *A'cháryas*, affording no information except as to the origin of their sects, and the history of the great or learned men who have appeared among them.

There is no doubt, however, but that they were persecuted by the Bráhmans. A tradition at Pattan says, that SANCARA A'CHÁRYA effected the destruction of a number of Jaina priests in that city, and the spot in which they are supposed to have met their fate is to this day called the *Lá-chóchár*.*

They were also persecuted by the Musalmáns, but only in common with other Hindús, as it does not appear the former were aware of any distinction, or made any difference between them.

The countries in which the Jainas are chiefly found are Gujerat, Cutch, Már'wár', Méwár', Málwá, Dhúndhar or Jeypúr, Hávánti, &c.

The Jainas of Gujerat, Már'wár', and Western Hindústán, are scattered over the country, and form a considerable proportion of the inhabitants of

* I have frequently heard the following legend of this event in Gujerat. While CUMÁRA PÁLA, who was a Jaina, was Rájá of Pattan, SANCARA A'CHÁRYA arrived at that city, and a dispute arose between the Jainas and his followers, respecting the first and last day of the month—the Jainas maintaining it was the first, and the Bráhmans that it was the last day. The former being in the wrong, by the assistance of some *mantra*, or incantation, addressed to the DÉVA CÁLKA, produced a false moon that night. SANCARA A'CHÁRYA, however (say the Bráhmans), detected the imposition, and to punish their disingenuousness, a few days afterwards, on visiting CUMÁRA PÁLA, he told him he came to warn him that the sea would that day break through its bounds and destroy the city, but that when it should rise as high as the battlements of his palace, a boat would arrive, and that those who got into it would be saved, but the rest of the population would be drowned. The Rájá, alarmed at this prediction, assembled all his *játis* and priests, and they seated themselves with him on the roof of his palace, in expectation of the sea and the boat. At the appointed time a storm arose, and the sea appeared gradually to approach, and at length arrived, rolling its waves furiously over the city. The boat, as foretold, now came in sight, and on its arrival at the palace the Jaina priests, eager to save themselves, immediately jumped into it, as they thought; but the whole being a mere delusion, they were all dashed to pieces at the foot of the palace-wall.

every city, town, and village. They are, however, said to be most numerous in the two former provinces, and particularly Már'wár'.

I am unable at present to give any precise information as to the proportion the Jains bear to the other classes of the population in these countries. The following estimate, however, will perhaps furnish some approximation to the comparative amount :

Páhlánpúr contains about four thousand inhabited houses ; of these about one thousand are inhabited by Jains.

Rádhánpúr is said to contain about four thousand houses ; and of these fourteen hundred are inhabited by Jains.

Pattan is said to contain about fourteen thousand houses ; but of these about eleven hundred only are said to be occupied by Jains.

In Júdhpúr there are said to be fifty thousand houses, of which about two thousand are those of Jains. It is, however, surprising that in a state where the highest civil offices are held by Jains, the proportion should be so small at the capital.

The town of Mírtha, in Már'wár', is said to contain about ten thousand houses, of which fifteen hundred are Jains.

Nágore	14,000 houses	.....	1,300 Jains.
Bíkánír.....	10,000 do.	.....	2,700 do.
Páli, in Már'wár'.	1,500 do.	.....	2,000 do.
Sajiet, ditto	7,000 do.	.....	2,000 do.
Jálúr, in ditto ...	4,000 do.	.....	1,100 do.
Jessalmír, in ditto	6,000 do.	.....	1,300 do.
Kishengarh	10,000 do.	.....	2,200 do.

It is to be remarked here, that, with the exception of Páhlánpúr, the above are merely the estimates of Jaina priests.

The Jains, I am told, receive all Hindús within the pale of their faith. The principal classes of their converts are mentioned in my paper ; but those I have questioned on the subject say they have succeeded best with the *Mahés'wara*, or Hindú *Vanyas*.

In addition to this it is to be remarked, that nearly the whole of their priesthood may be considered converts, that class being composed of individuals of almost all the pure classes of Hindús, purchased in their infancy, and consecrated to the duties of religion when ten or eleven years of age. Some assert that they only receive the offspring of *Vanyas* and Bráhmans into their priesthood.

The priests appear fond of controversy, and I have often heard of books written by them exposing the absurdity of Hindú doctrines; but from what I have seen, their ridicule is levelled at the commonly-received opinions of the Hindús in general, not at those of any particular sect.

The Bráhmans generally detest the Jainas, especially their priests.

That the Jaina religion was introduced into the west of India from the east, is, I conceive, sufficiently evident from the circumstance that the language in which the Jaina *Sútras* or sacred books are written, the *Mágadhá-bháshá*, is a dialect of the Sanscrit, understood to have been at a remote period that of the most eastern provinces of India, but of the precise period at which it was introduced into that part of India little can be said.

Some circumstances, however, of importance in the elucidation of these points, are admitted by all the sects of Jainas with whom I am acquainted. By their *Patávalis*, or the history of the succession of their high priests, it appears that in 845, dating from the deification of MAHÁVÍRA, or Samvat 375, a *Sád'hu*, named DÉVÁDHI CHAMÁSAMNA, first wrote the *Ágamasútras*, or holy books of the Jainas, on the leaves of the palm tree.*

Before this time none of them were committed to writing, they having always been retained in the memory of their priests, and taught and transmitted from *Sád'hu* to *Sád'hu* orally.†

The date of this occurrence is stated by the *Lúnca Patávali* to be 980 years after MAHÁVÍRA, or 510 from VICRAMÁDITYA. One set of these books is said to be still preserved in the library at Jessalmír.

In the *Tappá Jaina Patávali* it is further stated, that in the 984th year after MAHÁVÍRA, or 514 of the VICRAMA era, CÁLCA A'CHÁRYA, by order of INDRA (one of the Lords of their *Dévatás*), wrote the *Jaina-Sidd'hántas* or holy books, denominated the eleven *angas* and twelve *upángas*.

It is also stated in the same *Patávali* or history, that in the year 535 of the VICRAMA era, NARASINHA SÚRI A'CHÁRYA brought one hundred and forty-four (some say 1,444) copies of the religious works of the Buddhists from the country east of Bengal to the western part of India. Some Jainas

* The reason of this is stated to be, that the memories of the priests in that degenerate age became gradually impaired, and they were apprehensive lest the principles of their religion should be forgotten and lost.

† Similar to the customs of the Druids.

maintain that these books were his own composition, while others say they were merely translated by him from the scriptures of the Buddhists; the majority, however, allow that they were brought as stated. They are said to be commentaries on the Jaina scriptures.

The most ancient Jaina temples I have seen (those on Abú and at Chandravati) are stated by the inscriptions on them to have been built between the twelfth and fourteenth centuries of the Samvat era, or between Samvat 1100 and 1400.

In the *Patávali* I have before quoted, it is related that Jaina temples were first built (during the spiritual government of the *Tappá A'CHÁRYAS* *MAN-TANG SÚRI* or *MÁN DÉVA SÚRI*) in the year 882, after *VIRÁT* or *MAHÁVÍRA*, or 412 from *VICRAMÁDITYA*: this is allowed by the majority of the Jainas; however, some say they existed before that period, but were very uncommon.

From these facts, which are stated in most of the *Patávalis* I have seen, some inferences may be drawn as to the origin of the Jaina religion in this part of the country.

The only historical works I have been able to discover relative to persons or events, prior to the period of the last *Tírt'hancara*, *MAHÁVÍRA* (2,300 years ago) are the legends of their other *Tírt'hancaras*, the *Bala-dévas*, *Vasu-dévas*, *Prati Vasu-dévas*, and their saints.

The *Patávalis* give what may be considered a tolerably correct account of the succession of their high priests from *MAHÁVÍRA* to the present time; these were the same in all sects to *PRADYÓTANA-SÚRI* the twentieth or twenty-first *A'CHÁRYA*; who is supposed to have lived about seven hundred years after *MAHÁVÍRA*'s deification, and consequently about two hundred and thirty after *VICRAMÁDITYA*. At this time the schisms among the Jainas became numerous, and they have ever since kept lists of their *A'CHÁRYAS* separately.

The following is a description of some of the Jaina temples and *tírt'hs* in Gujerat from the *Mírát i Ahmadí*:

S'RÁVACA TEMPLES IN GUJERAT.

These, like the temples of the Hindús, are to be found in most of the towns and villages of Gujerat. The chief are,

1st. *Satrunjaya*. This is near Pali-t'hanna, a town depending on Sircar

Súrat. The place of worship is seated on the top of a high mountain, and is dedicated to AD'HÍSWARA RISHAB'HADÉVA. There are many temples of elaborate workmanship here; built it is said by SOMEJÍ, a certain *Vanya*, who expended 48,00,000 rupees in their erection. *Srávacas* resort to this place from all quarters in large bodies, which are denominated *Sanga*. At some periods a rich man intending to proceed thither makes his intention known, and invites all who choose, to accompany him. The person thus inviting them pays for their protection on the road, and all the road duties. This is considered a most praiseworthy action, and he is ever after entitled *Sangi*, or leader or chief of the pilgrimage. *Srávacas* send money every year from all parts to repair their temples.

2d. *Nímnát'ha*. This is a large temple on the mountain of Girnar, near Júnágarh, dedicated to NÍMNÁT'HA. Many stories are related of this place, which are too long for insertion here.

3d. *Gaurí Párs'wanát'ha*. This temple is in the district of Párkár, or on the western side of the desert called the *Rana*, in the vicinity of Cutch. Pilgrims in proceeding to this temple are exposed to great hardships. The image of PÁRS'WANÁT'HA, for the greater convenience of the *Sangas*, or assemblages of pilgrims, is now in general brought to Moréwára, a town on the east side of the *Rana*.

4th. *Sanca Párs'wandt'ha*. This temple is in the village of Sankésúri, also called Bárdése, depending on Múnipúr Sircár Pattan.

5th. *Ajitanát'ha*. This temple is on the mountain of Táranga, depending on the perganna of Chyralu.

6th. *Abú*. On this mountain, which is in the district of Sirohi, there are eight temples.

7th. At *Cómbhána*, near Amba, a temple of the Hindús, there are five *Srávaca* temples; these are said to be equal to those at Abú.

8th. In the town of *Háwi*, depending on Jambúsar, are three *Srávaca* temples.

9th. In the town of Narwára or Néhrwála, depending on the Howelli of Ahmadábád, and four *cós* distant from that city, is a temple, to which the *Srávacas* of both sexes pay a visit every year.

10th. *Nówdánagarh*. In this town are several *Srávaca* temples.

11th. *Ahmadábád*. In several *Mahalls* of this city are subterranean temples, excavated with great labour, and at a great expense, which appear to have been secretly formed from fear of the Musalmáns. They contain many

large images, particularly that in the Jóhériwára, where are also many monastaries of *Séw'ras* or Jaina priests, called by them *Pósál*.

In the house of ÁNAND JÍ LÁLCHAND, a *sarráf* or banker, is the representation of a mountain in the east country called *Samátsic'har*,* considered to be of great sanctity, and a place of pilgrimage for the Jains; this is covered with figures of men and animals, and a number of *S'rávacas* from Súrat and other places, who cannot make a journey to the mountain itself, pay their devotions to its representative here.

The *T'rt'hancaras* are placed in the order of their succession, but I believe RISHAB'HADÉVÁ the first, and MAHÁVÍRA the last, are regarded with more devotion than the rest. PÁRS'WANÁT'HA and NÍMNÁT'HA are also greatly revered.

The Hindú gods, although some of them, as the DÉVAS, CÁLCÁ, &c., are worshipped by the Jains, are yet all included, by their learned men, among the inferior divinities denominated *Vintrice* (?) and *Vanvintrice* (?) *Dévatá*, as the *Paisácha*, *Bhúta*, *Yacsha*, *Rácshasa*, *Cinnara*, *Cimpúrusha*, &c. &c.

It is stated in some works I have read, and by the Jains with whom I have conversed on the subject, that the subterraneous temples in Gujerat owe their origin to the invasion of Gujerat and persecution of the Hindús by the Musalmáns.

The Jains regard the Buddhists as schismatics, but do not appear to entertain any peculiar dislike to them. There are no Buddhists that I am aware of in this part of the country.

* The sanctity of *Samátsic'har*, as well as *Girnar* and *Páli-t'hanna*, &c. arises from their having been the mountains on which the deification of their *T'rt'hancaras*, ADNA'T'HA, NÍMNÁT'HA, &c. occurred.

PART III.

THE word *Jaina* is said to be derived from the Sanscrit word *Yātu*, or *Jétu*, signifying to employ great care in the preservation of life : it is also said to be derived from *jīta*,* denoting the conquest of the passions.

The people known by this appellation are generally divided into three sects : first, the *Swétámbaras* ; second, the *Digambaras* ; and, third, the *Bód'hamatis*, or Buddhists. The subdivisions, however numerous, are I believe all resolvable into one or other of these three sects.

The first is so called from the apparel of the priests, which is white. The Jainas of Gujerat are mostly of this sect.

The word *Digambara* is derived from *Dig* (or *Desa*), a region ; and *ambara*, clothing ; signifying, I am told, that they should use no other covering than the air. The *Sád'hus* of this sect, by their rules, ought at all times to remain perfectly naked ; they however are said to wear cloths of different colours. The *Digambaras* are most numerous in Rájpútána and northern Hindústán.

The third or Buddhists are scarcely known in the western part of India ; they are however included by the learned of the Jainas among their sects.†

These sects or divisions are called by the vulgar among the Jainas *Dória*, *Mória*, and *Gádria* ; names derived from the materials of the broom which the priests of the Jainas and Buddhists carry about with them.

The first, or *Dória*, are the followers of BUDD'HA ; the *Sád'hus*, or religious class of these, are said to use the tail of the Tartarian cow for their *owgha* or broom ; the second, or the *Mória*, are the *Digambaras*, whose priests employ the feathers of the peacock for that purpose ; the third are the *Swétámbaras*, who use a broom of wool.

The Jainas of all sects consist properly of only two classes, the *Sád'hu* and *Srávaca*, or the priesthood and laity.‡

The word *Sád'hu* signifies, as I am informed, a man who subdues his passions, and performs well the duties of his religion. The *Srávaca* is a

* The word *Jaina* is a regular derivative from *Jina* ; in the same manner as *Baudd'ha* is from *Budd'ha*.—G. C. H.

† It is singular that the large figure of RISHAB'HADÉVÁ, at *Satrunjaya* or Páli-t'hanna, is called by the *Srávacas* A'DI-BUDD'HA, or the first BUDD'HA.

‡ The *Sád'hwi* and *Srávacá* are the females of those classes.

a hearer of the *Sidd'hantas*, or sacred books, and a believer in the doctrines contained in them. *S'rāvaca*, however, is said to be an improper appellation as applied to the latter, the correct term for a layman being *S'rāmanópāsaca*, the signification of which is "the servant or follower of the *Sād'hus*."

The priesthood may be divided into two classes, the *Sād'hus* and *Jatís*—these were originally the same; at present, the first is composed of ascetics, who retire from the world of their own free-will, and pass their lives in meditation and austerities; and the second of individuals taken from all classes of the community, who are purchased in their infancy by the *Jatís*, and initiated into their order at ten or eleven years of age, they are a kind of secular priesthood, as far as relates to the possession of wealth, and some other indulgencies, although in some degree subject to monastic rules; the the *Sād'hwís* and *A'ryás*, or women of these religious orders, live separate from the males, and to them is in general committed the instruction of the *S'rāvacs*, or females of the *Vanyas*.

The *S'rāvacs* of Gujerat and Már'wár are mostly of the *Vaisya* or *Vanya* class, including some cotton-printers, silk-weavers, and husbandmen.

The *Vanyas* are subdivided into eighty-four *Nát*, or tribes; this number, however, includes both Jainas and *Máhéśwarís*, or Hindús.

Most of the Jaina tribes, as stated by themselves, are derived from *Rájpúts*, and *Bráhmans*.* The period about which the change of profession or caste, and religion, is said to have occurred, in the most considerable, or the *S'rímálí*, *O'sarwál*, and *Pórewár* tribes, will be found in the following detail.

Of the eighty-four tribes of Vanyas.

1. The *S'rímálí* tribe. This is said to be derived from the *Parmár†* tribe of *Rájpúts*, which appears at some early period to have migrated from *Sinde* and *Parkar*, to Már'wár, and a part of it to have taken up its quarters

* It is worthy of remark, that the Jainas of this part of the country universally acknowledge their derivation from the Hindús; and as a further proof of their origin, it is to be observed that their marriage ceremonies are to this day performed by a *Bráhman*, styled the *Nát Guru*, or priest of the tribe.

† Tradition records that the dominion of this tribe extended from *Sinde* to *Málwa* previous to the *Musalmán* invasion. *Chandravatí*, a city in ruins near the *Abú* mountain, appears to have been their capital on this side of India.

at the town of *S'rimál*, *Bhínmál*, or *Bhílmál*, about fifty cós north of *Páhlán-púr*: these *Parmárs*, it is stated, became *Vanyas* in or about Samvat 222.* (A.D. 166.)

The *S'rimdlí*† tribe is considered the first in rank among the Jaina *Vanyas*, but it is generally supposed the *S'rimáls*, *O'sawáls*, and *Pórewárs*, are all descended from the same stock, and that all are derived from the inhabitants of *Bhínmál*.

2. The *O'sawál* tribe. These are also descended from a division of *Parmár Rájpúts*, who came originally from Parkar to the town of *Bhínmál*, and became *Vanyas* at the same time with the *S'rimáls*. Their name is derived from that of *Osí Mátá*, a *dévi* or goddess worshipped at *O'síanagar*, a town about eighteen miles north of *Júdhpúr*.

It is said, that about the period above stated, a famine prevailing in *Márwár'*, *U'PAR*, and *OHAR* or *OSAR*, two of the brethren of the *Rájá* of *Bhínmál*, with some other persons of the *S'rimáls*, abandoned that city, and founded the town of *O'síanagar*, and that these emigrants were *Hindús*, and mostly *Vanyas* when they left *Bhínmál*, the change of caste having occurred some years previous to their migration.‡ They were afterwards converted to the Jaina religion by a *Jatí*, named *RATTAN PRABHÁ SU'RI*. The mode in which their conversion was effected is related in the Introduction, on the authority of *RATTAN SINHA BANDHÁRÍ*, the *Nāib* of the *Súba* of Gujerat.

It is also stated of the *O'sawáls*, that they were originally of all the classes of *Hindús*, from the highest to the lowest; the whole of the inhabitants of *O'síanagar*, *Bráhmans*, *Rájpúts*, &c., including the *Rájá* or *T'hácúr*, having been converted to the Jaina faith at one time, and having assumed the appellation of *O'sawál*.

Independently of the *Visá* and *Dassá* divisions of this tribe, to be described hereafter, there are several subdivisions which appear to have arisen from professions, and are denominated *Vaidya*, *Vadéra*, *Síat Lúnia*, *Gándi*, *Bandeh*; or physicians, merchants, sellers of drugs, &c.

The members of this tribe are said to be all Jains, and I have never been able to discover any of the *Hindú* faith among them. The *Visá O'sawáls* and *Visá S'rimdlís* intermarry.

* I have not been able to discover the reason of this change of tribe.

† The *Cáladévi* of this tribe is said, consistently enough, to be *MAHA' LACSHMI'*.

‡ This, however, seems doubtful, from the statement given in the *Mírát i Ahmadi*.

3. The *Pórewárs*. The name of this tribe is said to be derived from their having originally inhabited a suburb of Bhínmal. They are generally said to be descended from the *Parmárs* of Bhínmal; some however state them to have originated in the city of Chandravatí, in the petty district of Siróhi.

In concluding this account of the three principal tribes of *S'rāvacas*, it may be proper to remark, that most of the tribes of *Vanyas* are divided into two classes, called *Visá* and *Dassá*, and some have a third and fourth, called *Pancha* and *A'd'hyá*. The first or *Visá* class comprises those whose origin is perfect or legitimate, no stain being attached to the families from which they are derived.

The second or *Dassá*, on the contrary, are those to whom some stigma is affixed from their being the offspring of women who have contracted second marriages.*

The *Panchas* and *A'd'hyás* are still lower grades, being the descendants of *Vanya* fathers by women of inferior caste.

The marriages of these are confined to their respective classes, that is the *Visás* intermarry with the *Visás*, and the *Dassás* with the *Dassás*, &c.

Of the separation of the Visá and Dassá classes of the S'rimáli tribe.

This event appears to have taken place about S. 1275 (A.D. 1219), and the following is related to have been the cause. VASTÍ PÁLA, and TÉJU PÁLA, the founders of the magnificent temples at Dilwára (on the Abú mountain), and Cumbhária (near Ambá Bhavání), were *Pórewárs* and children or descendants of a second marriage on the female side, and therefore of the *Dassá* division.

On some occasion a grand entertainment being given by them at Pattan,

* From what I can learn, there is no prohibition in the sacred books of the Jainas to the contraction of second marriages by their females, indeed the contrary seems most probable, as their first god A'DINÁ'T'HA or RISHAB'HADÉVA married a widow.

The women of inferior tribes among the Jainas, almost universally, on the demise of their first husbands, marry a second time; the *Vanya* women do not (there are, however, exceptions) merely, I believe, because such engagements are considered degrading by the higher classes in this country; it is remarkable that in this opinion they are followed by many of the Muhammedans. The custom of forbidding second marriages to women is said by the Jainas to have taken its rise among them in the time of VICRAMA'DITYA.

the majority of the tribes of *Vanyas* in Gujerat, were invited to meet them there. It so happened, that when they were assembled, some envious or factious person among the *Visás*, or those most perfect in their descent, maliciously upbraided his hosts with their illegitimacy, and refused to eat with them. This demur appears to have been fatal to their union, for after many ineffectual attempts made by them to remove his objections, he succeeded in persuading the whole of the *Visás* to follow his example, and they retired from the feast; the *Visás* and *Dassás*, therefore, have ever since remained distinct.

The *Dassá S'rimdlís* and *Pórcwárs* in the northern parts of Gujerat are partly Hindús and partly Jainas. It is a remarkable fact, that whichever faith they may profess, they, in common with the *Dassá O'sawáls*, all intermarry. The Hindú husband pays his devotions to MAHÁDÉVA, at the *T'hácurdwára*, while his wife attends the reading and preaching of the *Jatís*, at their *apásdras* [*apásrayas*?] or monasteries. The *S'rimdlís*, *O'sawáls*, and *Pórcwárs*, are numerous in almost all the large towns of northern Hindústán.

From another account by a Hindú genealogist, it is said *S'rimál* or *Bhín-mál* was originally a very large city and contained many thousand families of these tribes. A famine which desolated Márwár' at some remote period, caused their separation, and those who emigrated northward took the name of *O'sawáls*. Those who went eastward were called *Pórcwárs*, and a number of a rather inferior tribe, who migrated to the south and to Bengal, where they still reside, were called *Dévid'hús*. Those who remained in *Bhín-mál* retained the name of *S'rimálís*; a number of the inhabitants of *S'rimál*, who are considered *Vanyas* and included in their list of tribes, were denominated *Sónís* or goldsmiths. Of these there are two tribes: those who departed from *S'rimál* on this occasion are called *Tágar Sónís*, and those who remained *S'rimáli Sónís*.

4. The *Móde*, *Móre*, *Móhr*, or *Móhriá* tribe. This tribe is composed of Hindús and Jainas.

5. The *Kharáitá* tribe consists mostly of Jainas.

6. The *Lár* is a Hindú tribe.

7. The *Vayrá* comprises both Hindús and Jainas.

8. The *A'ggarwúl* tribe. This is said to be the most numerous of all the tribes of *Vanyas*; it is partly Hindú and partly Jaina. The Jainas are of both the *S'wétámbara* and *Digambara* sects; they reside chiefly in the north-western parts of Hindústán.

9. The *Handikwál* or *Khandikwál* tribe. Khandír is the name of a town or district in the Jaipúr territory, and these *Vanyas* having originally been Rájput inhabitants of that town, take their name from thence. They are Jains, and of both the *S'wétámbara* and *Digambara* sects.

10. The *Bejáwargé* tribe is mostly resident in Hindústán, the members are Jains, as are likewise those of the following :—11. *Harsóra* ; 12. *Nógilá* ; 13. *Jailwál* ; and 14. *Jálórú* or *Jálóhrú*.

15. *Jhárólá*. Mostly Hindús. They derive their origin from an ancient city, the ruins of which lie eight cós north of Rádhanpúr ; tradition says it was chiefly inhabited by Bráhmans, and that it was destroyed by one of the Ghóri kings of Dehli ; scarcely any vestiges of it remain, except mounds of bricks and rubbish.

16. *Hómbar*, called *Hambar Vánicá* or *Vóhr Vánicá*. This is a tribe of *Digambaras*.

17. *Gujar*, *Gujarval*, and 18. *Gujar Vanicá*. All these, I believe, are the same ; the individuals of these tribes profess many trades, being goldsmiths, husbandmen, &c. : they are Jains.

19. *Nímá*Jainas.

20. *Dindú* and *Dindúwal* . do.

21. *Capóle* do.

22. *Cátorá* or *Catanórá* ... do.

23. *Cúcal* do.

24. *Júngrá*..... do.

25. *Edal*..... do.

26. *Ganbhóyá*..... do.

27. *Póhcarwál* *Digambaras*.

28. *Naytá* do.

29. *Nánawál* do.

30. *Ladú* (a division of the *S'rimális*),
Jainas ; they are said to have been
originally barbers.

31. *Dháriwál*.....Jainas.

32. *Vaghirewál*, *Wághira*, }
or *Wághorú*..... } do.

33. *Miraf'hwál* do.

34. *Sórúná* do.

35. *Palléwál*. These are mostly to
be found in the northern parts of
Hindústán ; they are Jains.

36. *Bambhújút* or *Bambh*, Jainas.

37. *Dísawál*, Hindús and Jains.

38. *Súharwál*, *Sóhrias* or }
Shéhrias..... } Jainas.

39. *Kharediá*, *Khúrediá*, }
Kharhidiá } do.

40. *Jaiwál* do.

41. *Chitráwál*..... do.

42. *Carantwál* do.

43. *Súnáwál* do.

44. *Sójantwál*..... do.

45. *Nágarnát*, Hindús and Jains.

46. *Dasórá*..... do.

47. *Vanchavánicá* . do.

48. *Carihyá* do.

49. *Bhadirá*Jainas.

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| 50. <i>Méwará</i>Jainas. | 84. <i>Nágorá</i> or <i>Nagore Vánicá</i> , Jainas. |
| 51. <i>Narasinhapura</i> } Jainas; <i>Digam-</i>
or <i>Narasinghapóre</i> } <i>baras.</i> | 85. <i>Sáchorá</i> do. |
| 52. <i>Pancham</i> or <i>Panchamálá</i> , Jainas. | 86. <i>Madáhrá</i> do. |
| 53. <i>Hállar</i> do. | 87. <i>Bráhmaná</i> do. |
| 54. <i>Hárwál</i> do. | 88. <i>Mandúra</i> do. |
| 55. <i>S'ric'handúr</i> or <i>S'ric'handúra</i> do. | 89. <i>Súroti</i> , <i>Máhéswarís</i> and Jainas. |
| 56. <i>Wayes</i> or <i>Vaysá</i> do. | 90. <i>Néphúli</i> ... do. |
| 57. <i>Rastúkí</i> do. | 91. <i>Sabúra</i> do. |
| 58. <i>Cambójá</i> do. | 92. <i>Khéralúdá</i> do. |
| 59. <i>Jindá</i> or <i>Jinrá</i> do. | 93. <i>C'athsúriá</i> do. |
| 60. <i>Sógirá</i> do. | 94. <i>Súnár</i> ... Jainas and <i>Máhéswarís</i> . |
| 61. <i>A'chitta</i> or <i>A'chitwál</i> do. | 95. <i>Nágóri Móre</i> do. |
| 62. <i>Chóbá</i> do. | 96. <i>Náyilnág</i> ... do. |
| 63. <i>S'rigúr</i> do. | 97. <i>Dácriá</i> ... do. |
| 64. <i>Cáyéja</i> do. | 98. <i>Bániá</i> do. |
| 65. <i>Bháganni</i> do. | 99. <i>Jeláná</i> do. |
| 66. <i>Válmicá</i> do. | 100. <i>Vindú</i> do. |
| 67. <i>Téshorá</i> do. | 101. <i>Mádáliá</i> ... do. |
| 68. <i>Tilhúdá</i> do. | 102. <i>Bábar</i> do. |
| 69. <i>Ashtwargá</i> do. | 103. <i>Jeráná</i> ... do. |
| 70. <i>Gájóná</i> or <i>Gájnódá</i> do. | 104. <i>Cátúliá</i> do. |
| 71. <i>Vádhanbrá</i> do. | 105. <i>Dádúhal</i> ... do. |
| 72. <i>Vighónátí</i> do. | 106. <i>Sónésá</i> do. |
| 73. <i>Padmavatiá</i> do. | 107. <i>Rájsá'cha</i> ... do. |
| 74. <i>Dhávra</i> Jainas and Hindús. | 108. <i>Lúndá</i> or <i>Lúdi</i> , <i>Súc'ha</i> , Jainas. |
| 75. <i>Bórebóle</i> do. | 109. <i>Bari</i> do. |
| 76. <i>Jehriá</i> do. | 110. <i>Sa</i> do. |
| 77. <i>Mághorá</i> ... do. | 111. <i>Da</i> do. |
| 78. <i>Gólúwal</i> do. | 112. <i>Rájórá</i> do. |
| 79. <i>Chitrórá</i> do. | 113. <i>Sómeyal</i> do. |
| 80. <i>Cácléviá</i> do. | 114. <i>Khandóle</i> do. |
| 81. <i>Tándiá</i> do. | 115. <i>Mohú A'ghátá</i> do. |
| 82. <i>Bhóngrá</i> or }
<i>Bhúngadá</i> } do. | 116. <i>Chandranórá</i> do. |
| 83. <i>A'ndóre</i> , <i>A'nhórá</i> do. | 117. <i>Khérwá</i> Jainas and Hindús. |
| | 118. <i>Cháchá</i> do. |
| | 119. <i>Báj</i> do. |

120. <i>Nangadréhá</i>.....Jainas.	140. <i>Nérótiá</i> Jainas.
121. <i>Nangapráhú</i> do.	141. <i>Vándbhóre</i> do.
122. <i>Bhétórá</i> do.	142. <i>Vúthú</i> do.
123. <i>Cábú</i> do.	143. <i>Vépháli</i> do.
124. <i>Deótic</i> do.	144. <i>Mahéswará</i> do.
125. <i>Nát'hgatú</i> do.	145. <i>Catúniwál</i> do.
126. <i>Chórewál</i> do.	146. <i>Lóda</i> do.
127. <i>Ghanórá</i> do.	147. <i>Chandrawál</i> do.
128. <i>Sródé</i> do.	148. <i>U'chatwál</i> do.
129. <i>Gabhú</i> do.	149. <i>Bániwar</i> do.
130. <i>Jaighyá</i> do.	150. <i>Harsúá</i> do.
131. <i>Jancsúriú</i> do.	151. <i>Narániá</i> do.
132. <i>Sarihyá</i> do.	152. <i>Haiharriá</i> do.
133. <i>Súcháwál</i> do.	153. <i>Mangawar</i> do.
134. <i>Vavirá</i> do.	154. <i>Bhárejá</i> do.
135. <i>Bhámo</i> do.	155. <i>Húngarwál</i> do.
136. <i>Vésrá</i> do.	156. <i>Póremál</i> do.
137. <i>A'chúrciwál</i> do.	157. <i>Cabehú</i> do.
138. <i>Prépáriciwál</i> do.	158. <i>Bákú</i> do.
139. <i>Górewál</i> do.	159. <i>Nágadharrá</i> do.

It will be observed by this list, that instead of eighty-four tribes there are nearly twice that number; the names are, however, copied from a Jaina list, and I have not thought it proper to interfere with them, although it may be supposed there is some mistake, or, perhaps, repetition under different names. Most of those above detailed are taken from those of towns and districts.

The chief, or more considerable tribes of Jaina *Vanyas* in Gujerat and Már'wár', do not exceed thirty, the remainder are almost unknown in those parts of the country.

By some accounts it appears that in the time of VICRAMÁDITYA, there were only twelve and a-half tribes of *Vanyas*; these were the *S'rípúr*, *O'sián*, *Mírat'hiú* or *Mírat'hwál*, *Pálliwál*, *Póhcarwál*, *Jáyil Cánt*, *Harisáyá*, *Jindúwál*, *Diddúwál*, *Vagiriwál*, *Níraníá*, and *Khanditwál*.

Independently of the foregoing distinction of *Nát*, or tribe, the Jainas are divided into eighty-four religious sects, denominated *Guchch'ha*, or congregations, of which I believe the most considerable, and most opposed in their tenets, are those of the *Digambara*, and the *Tapá*, and *Lúncá S'wétámbaras*.

The most material difference of religious opinion between these sects will be detailed ; that of the rest, I believe, is trifling.

It is necessary it should be observed here, that besides the eighty-four *Guchch'ha*, there are also many inferior divisions of dissenters, called *Mat* or *Mitti*.

The origin of the eighty-four sects of Jainas, as detailed in the *Pat'avalis*, or lists of the succession of their *A'chúryas*, properly includes their history from the period of MAHÁVIRA, the last *Tírt'hancara*, to the present time, and it is, perhaps, not quite correct to separate them ; however, for the sake of perspicuity, a list of their *A'chúryas*, and the remarkable occurrences recorded by them, will be given hereafter, with a summary of their ancient or fabulous history.

In the time of MAHÁVIRA there were only nine *Guchch'has*.*

The following is a list of the eighty-four *Guchch'has*, with their subdivisions or *Mats* :—

1. The *Vara Guchch'ha*. This is said to be the most ancient of all the sects.

2. The *C'hartar Guchch'ha*. This sect is derived from the *Chandra Guchch'ha*, it is divided into eleven *Bésnas* or schisms, which all arose from that of the *Bhat't'árakíá* ; the following is a list of those best known :—

The 1st, or *Bhat't'árakíá* sect, was founded in S. 1080, or A.D. 1024.

The 2d, or *Vara A'chúrya*, arose in 1564 of MAHÁVIRA, or 1094 of VICRAMÁDITYA ; its founder being a certain *Vanya*, named CANDRAPIA.

3d, The *Laghu A'chúrya*, or lesser *C'hartar*, took its rise in S. 1381, A.D. 1325.

4th, The *Végrá C'hartars* : this originated in S. 1422 ; A.D. 1366, or during the reign of MAHMÚD BÉGARA, king of Gujerat, from whom they take their name.

5th, *Píplia* or *Pímplia*, S. 1415, A.D. 1359.

6th, *Ranga Vijya*, S. 1700, A.D. 1644.

The 7th, or *Bhárhárkiás*, derive their name from BHÓWSU'RIA, a *S'rí Púja*, or high priest, and HARKCHANDA, a *Mahájan* of the town of Bárhmere.

8th, or *Chand Súria* ; this sect is ascribed to an *A'chúrya*, named SÁGAR CHAND SU'RI, and the date of its origin is S. 1505, or A.D. 1449.

* MAHÁVIRA had eleven *Gand'hurs* or disciples ; of these eight formed *Guchch'has* or sects, the remaining three united in one.

9th, *Móhvi C'hartar*, S. 1255. The distinctive tenet of this sect is that the *Tír'hancaras* have six *Calyánas* (an account of these will be given hereafter), or felicitous periods in their lives (the remainder of the Jainas maintain they have only five), and that their installation as *Rájás* forms the sixth *Calyána*; also, that the translation of MAHÁVÍRA,* from the womb of the Bráhmaṇ's wife to that of the *Rání* of SIDD'HARAT'HA RÁJÁ, is his sixth *Calyánaca*.

The *C'hartars* keep the *Pác'hi* or full moon on the 14th of the month, and reckon fifty days from the 14th *A'sársúd* to the 4th *Bhádaráśúsúd*, the last day of the fast called *Pajusan*, and in this time the *Súd'hus* of this sect will not move out of the village or town in which they reside except in cases of emergency, and on the days called *Ti'ths* they abstain from all labour, and occupy themselves entirely with the duties of religion; almost all sects of Jainas conform to this rule. The *Ti'ths* are the 2d, 5th, 8th, 11th and 14th, or 15th days of the lunar month.

The *C'hartars* believe in the forty-five *Sútras*, and worship the images of the *Tír'hancaras*.

3. *Tapá Guchch'ha*. This is said to have taken its rise in S. 1285, A.D. 1229, and its name from the following circumstance. A certain *Srí Púja*, or chief priest of the Jainas, being on his travels, arrived at the fort of Chitore, and took up his residence there under a banyan tree: he appears to have been pleased with his quarters, as he remained under this tree six months, performing during the whole of that period the *A'mbil tapasyá*, which consists in abstaining from all kinds of food except bread or rice mixed with water, but without any salt or condiment.

From this extraordinary penance, the *Rána* of Chitore gave him and his followers the name of *Tapás Tapasyás*, or *Tapaswís*; they are also called *Chitoris*.

According to the statement of the *Tapás*, the Jainas for eight generations after MAHÁVÍRA were called *Nigrant'ha*, or *Alóbbhi*,† i.e. exempt from all passion or desire: there was then no difference of sect among them. In the time of A'CHÁRYA SÓHASTI SÚRI, or 345 years after MAHÁVÍRA, their name was changed to that of the *Cótic*, or *Corynia Guchch'ha*.

* See the History of MAHÁVÍRA, in the Asiatic Researches.

† See Mr. Colebrooke's paper on the Jainas, Asiatic Researches, vol. ix. p. 300.

In after times they received the following names in succession : *Chandra Guchch'ha*, *Vanavásti Guchch'ha*, *Vará Guchch'ha* ; and, lastly, that of *Tapá Guchch'ha*, as above related.

The *Tapá Guchch'ha* is divided into thirteen *besnas* or sects ; there is, however, I am told, but little difference between them, except on trifling points of doctrine : they are named after the A'CHÁRYAS, by whom they were instituted, viz.

1st. The *Vijaya Dévú Súri*. This division arose in S. 1731, A.D. 1675.

2d and 3d. The *Vijaya Rájá Súri*, and *Camalcasá*. These were founded by *Chélas*, or disciples of HÍMVIMAL SÚRI, and A'NANDVIMAL SÚRI, A'CHÁRYAS, in or about S. 1590, A.D. 1534 ; the latter are now said to have become *Chartars* at Jessalmír.

4th and 5th. *Vari Pósál* and *Lóri Pósál*. This separation from the rest of the *Tapás* occurred in S. 1582, A.D. 1526, and is ascribed to the following trivial circumstance. HÍMVIMAL SÚRI and A'NANDVIMAL SÚRI, the 57th and 58th A'CHÁRYAS of the *Tapás* being at Cambay, the *Vanyas* of that city lodged the first, or the *guru*, in the smallest *Pósál* or monastery, and the second, or his disciple, in the largest ; from this occurrence they derive their names.

6th. The *Ságar Guchch'ha*. This arose in S. 1613, A.D. 1557, during the spiritual government of VIJAYA RÁJÁ SÚRI, having been instituted by a *Jatí* named DHARMA SÁGAR, in conjunction with SÁNTIDÓS SHIÁT, a merchant of Ahmadábád.

In this sect a particular family of *Vanyas* (that of SÁNTIDÓS), performs the ceremony of the consecration of the *S'ri Púja*, and consequently the functions of high priest.

7th. The *Camal*, or *Cawal Guchch'ha*.

8th. *Catacpúra*. The *Sád'hus* of this sect have some peculiarity in the *Owgha* or broom they use.

9th. *Vijaya A'nandsúri*. This sect took its origin in the time of the 60th A'CHÁRYA, VIJAYA SAINA SÚRI, about S. 1656, A.D. 1600. The founder is said to have been the brother of that A'CHÁRYA.

10th. *Vijaya Ratna Súri*.

11th. *Agamiá*. The origin of this sect is ascribed to the 13th century of VICRAMÁDITYA ; they keep the full moon or *Pác'hi* on the 15th of the month, and the *Pajusan* on the 5th of *Bhúdarwásúd*.

12. *Vamdmitti* or *Bráhmitti*. A sect denominated *Bráhmádlitya* is said

to have arisen in 826 of VICRAMA. This appears to be the same with the *Vrimánia* or *Bráhmánia*, otherwise *Bráhmámitti Guchch'ha*, some of whom are said to be residing at Pattan.

13th. *Nágóri Tapá*. The date of the sect is said to be S. 1572, A.D. 1516.

All these *besnas* have their *S'ri Pújas*.

The principal tenets of the *Tapás* are, 1st. The preservation of life in all its forms; 2d. The worship of the images of the *Tirphancaras*; 3d. The acknowledgment of, and belief in the forty-five *Sútras*, or holy books. They are also enjoined *Tapasyá*, or penance; *Síla*, or chastity; *Bhava*, benevolence or liberality; and *Dána*, or charity: they acknowledge seven *Cshétras*, or objects of peculiar veneration and expiatory charity when at the point of death, viz. the *Sád'hu* and *Sád'hwí*, *S'rávaca* and *S'rávacá*; the repair of temples, consecration of images; and lastly, the preservation and copying of their scriptures.

The *Tapá Jatís* are not allowed to move about the country from the *Samvachéri*, or the last day of the *Pajusan* to the 14th of *Cártic-súd*, in all, seventy days:* they keep the *Pác'hi*, or full moon, on the 14th day of the month, and the *Samvachéri*, or 8th, or last day of the *Pajusan*, on the fifth of *Bhád'arwasúd*.

The *Tapás* are said to hold that a *Sád'hu* may converse with women, if he find it impracticable to remain without them. It is also said, their *Jatís* may eat flesh, if dressed and given to them by Hindús, and also drink wine: this, however, is denied by them.

They will not allow their scriptures to be read by a *S'rávaca*, or a layman.

The following are inserted as forming some of the chief peculiarities of opinion distinguishing the *Tapás* and *S'wétámbaras* in general from the other sects of Jainas.

1st. The *Tapás* and *S'wétámbaras* worship inferior *dévatás*, and even those of the Hindús as the *Deví Cálí*, or *Ambá Bhavóní*, &c.

2d. They say that in a religious quarrel it is lawful to kill all those who injure or oppose them.

3d. The *Tapá S'rávacas*, men and women, assemble together in the *A'púsára*, or convent of the priests, on the night of the 15th of *Gnan Panchmí Cártic-súd*, and remain employed in religious exercises the whole of the night.

* This is called the end of the *Chowmása*, and is common to all Jainas.

4th. They say that those who have built temples and consecrated images, will attain *mócsha*.

5th. That RISHAB'HADÉVA was a *Júgli* or *Yugala* (one of the ancient race of giants inhabiting the earth), and that he married the widow of another *Júgli*, and had two children by her.

6th. That only two of the *Tírt'hancaras*, viz. MALLINÁT'HA and NÍM-NÁT'HA lived single, the rest having been all married.

7th. That penance and works will enable persons of both sexes to attain *mócsha*.

8th. That MALLINÁT'HA, the nineteenth *Tírt'hancara*, was a woman.

9th. That a *Sád'hu* may possess fourteen articles of equipment, viz. three cups or vessels, three sheets or blankets, a *húli* or scrip, broom, &c.

10th. That in extremity of hunger the *Sád'hu* may eat any kind of vegetable, and that a *Sád'hu* may drink cold water: they generally drink hot or warm water.

11th. They say that the laity and men of the lowest caste, and even those who ornament the persons, may obtain *mucti*.

12th. They say that in the time of MAHÁVÍRA, the *Bhavanapati Indras*, or angels of the infernal regions, ascended to heaven to assault and displace the *Dévatás*, or angels, thence, and that they were expelled by the *Vajra* or thunder of the heavenly host.

13th. That MAHÁVÍRA passed through twenty-seven transmigrations, from the son of RISHAB'HADÉVA to his last incarnation; other sects say twenty-eight.

14th. They place a *covra* (a large shell or conch) before them when at their devotions, and pay their adorations to it.

15th. The images of the *S'wétámbaras* are represented in a sitting posture, with a *candóra* or string round their loins, and are ornamented with precious stones.

16th. They say that *Carma*, or the retributive effect of evil actions, is destroyed by penance.

17th. That *Carma* is as intimately blended with the soul, as milk and water mixed.

18th. They consider the *Tírt'hancaras* as supreme deities.

19th. Their women perform religious ceremonies and touch their images.

20th. They bore the ears of their novices, and tie on the *múmti*, or mouth-cloth, by passing the ends of it through the orifices.

There are numerous other differences of opinion and practice, most of which would be unintelligible without a commentary.

4. The *Lúncá*, or *Ric'hmati Gucheh'ha*. This sect is divided into several congregations, the chief of which separated from the *Tapás* in S. 1531, or 2023 after *VÍRÁT*, or *MAHÁVÍRA*, A.D. 1475.

5. The *Gujerati Lúncás*. There are said to be nineteen divisions of this sect; those best known are the following:

1st. The *Mút'hi Pac'ha*, or *Kesowji*.

2d. The *Náni* ditto, or *Cúnwarji*.

3d. The *Dhámají*.

4th. The *Talacsí*.

These, like most other sects of Jains, are named after their founders.

The following are congregations of *Lúncás*, not included in those of Gujerat:

1st. The *Nágóre Lúncás*.

2d. The *Utrádi* ditto, S. 1541, A.D. 1485.

3d. The *Vijámiti*, S. 1570, A.D. 1514.

It is said there are other sects in different parts of Hindústán. I have not, however, been able to obtain their names.

Each of the above has its *S'ri Púja* or *A'charya*.

The following account of the period and cause of the secession of the *Gujerati Lúncás* from the other Jains, is translated from a paper given to me by a priest of that sect:

In the sixteenth century of the Samvat era, there lived at Ahmadábád a certain Jaina *Vanya*, named *LACHÁ SHÁH*, by profession a *sarráf*, or money-changer, a man rigidly observant of the precepts of his religion.

It happened that one day a Muhammadan *sipáhi* having exchanged a *máhmúdí* at his shop, purchased some partridges with the change, and killed them for his dinner in the *sarráf's* presence. *LACHÁ SHÁH* being much distressed at witnessing this sinful act, and conceiving he had participated in the crime, abandoned his trade, and to gain a livelihood, employed himself in copying the *Sidd'hántas*, or scriptures of the Jains. Becoming by this means acquainted with their contents, he discovered that their precepts were neglected, and that the *Jatís* taught a spurious doctrine of their own instead.

This being satisfactorily proved by him on the authority of the *Sidd'hántas* to several of his friends, they agreed with him to reform, and be guided

only by the text of their religion and law. They therefore abandoned the worship of images, for which there is no sanction in their sacred books. This reformation took effect in S. 1531, A.D. 1475.

The *Tapá* Jainas, or image worshippers, complained of this sect to SHÁH JEHÁN, who notwithstanding, protected them, as did AURANG-ZÉB; the latter even caused a public disputation on the principles of their religion, to be held at Ahmadábád.

It is said, however, that this sect was in existence before the period of LACHÁ SHÁH, and was then known under the denomination of the *T'hivar Guchch'ha*.

There are forty-eight points of difference in religious opinion between the *Tapás* and *Lúncás*; but as the insertion of the whole of them would be tedious and they would require much explanation, I shall content myself with enumerating the chief and most intelligible of them.

Their principal distinctive tenets, then, are:

1st. A belief that false expositions or commentaries, such as the *T'icá*, *Chúran*, *Bhášhya*, *Pracarána*, &c., and even poetry and romances, have been added to the number of their sacred books by the *Tapá* Jainas; they therefore acknowledge only thirty-two *Sútras*, regarding the rest as apocryphal. The *Sútras* or scriptures of the Jainas, allowed to be genuine by the *Lúncás*, are the eleven *anga*, the twelve *up'anga*, four *chéde*, four *mala sútras*, and the *avaśyaca*.

2d. They assert that there is no mention of temples or images, and their worship, or pilgrimages, in the original *Sidd'hántas*, and that no such buildings, representations, or ceremonies, were in use, performed, or considered meritorious, in ancient times; they therefore have no temples, nor do they worship images or make pilgrimages.

3d. They keep the *Pác'hi* or full moon on the 15th, instead of the 14th day, and the last day of the *Pajusan*, on the 5th instead of the 4th *Bhúdarwasúd*.

4th. The *Lúncás* allow only four *Cshétras* or classes of beings meriting peculiar veneration, or as objects of expiatory charity, viz. the *Sád'hu*, *Sád'hwí*, *S'rávaca* and *S'rávacá*: they conceive it their duty, therefore, to serve the religious, the aged, poor, sick, and infirm of these classes, and to supply their wants.

5th. In opposition to the *Tapás*, and some other sects, they allow *S'rávacas*, or indeed any person, to read their sacred writings.

6th. They consider it unlawful for a *Sád'hu* to ride on any animal or vehicle.

7th. They deny that a man may not kill another, let the provocation be what it may.

8th. They do not bore the ears of their novices, as the priests of other sects do.

The *D'hónd'hiús* are a sect of *Lúncá* Jainas, which separated from the parent stock in S. 1724, A.D. 1668. They entertain in general the same religious opinions with the *Lúncás*.

The *D'hónd'hiús* form several sects (some say eighteen), of which the following are the most considerable or best known.

1st. The *Daryápúra*. The chief distinction marking these is that they omit the *Naucár* (the creed of the Jainas) when they pray or preach.

2d. *Dharmadárjī*. These repeat the *Naucár*; the *Sád'hus* of this sect, however, are said to eat food which has been cooked and kept for some time: this, most of the other Jainas will not, conceiving that after a certain period incipient life is generated in it.

3d. The *Tírúpanthī*. The principal distinction in the tenets of this sect is, that they do not, like other *S'rāvacas*, redeem the lives of animals or insects from those about to kill them, as they conceive themselves in that case answerable for any injury those redeemed may occasion to animal life during the period of their existence so prolonged.

4th. The *Lowji ric'h no Parwár*.

5th. *Múlchandjī*.

6th. *A'jarúmarjī*.

7th. *Calla Ric'h*.

The priests of the *D'hónd'hiús* are the *Sád'hus* of the *Lúncás*.

The *A'nchliá Guchch'ha*. This sect took its rise in Samvat 1169, A.D. 1113: the founder was an A'CHÁRYA, named A'RYA RAC'HÁT SÚRI. It appears from their books that in the time of U'DYÓTAM SÚRI (the thirty-fifth A'CHÁRYA from MAHÁVÍRA), who is supposed to have lived in the fourth century of the Samvat era, they were called the *Vará Guchch'ha*; they were afterwards denominated the *Sankésrá Guchch'ha*, from a village in the Pattan district; and on their removing to the town of Nána Bíra in Gódewar, they were called *Nánáwál*. A'RYA RAC'HÁT SÚRI, the reputed founder of the *A'nchliá* sect, it is said was born in Samvat 1136, A.D. 1080. This man, after he became a priest, took up his abode at Chámpánir or Powagurh, where he

became famous for his sanctity and works, and in his time his followers were first denominated the *Vaddhi Pac'ha*.

Of the name *A'nchliá*, which they afterwards received, there are two derivations; one from *anchala*, a cloth or handkerchief which they raise to their heads when saluting their priests, a mode of salutation said to have been practised by the gods; the other is from the word *achala*, signifying immoveable. The reason of the latter is related as follows:

JAYASINHA, the *chéla* of A'RYA RAC'HAT SU'RI, visiting Pattan during the reign of Rájá CUMÁRA PÁLA (the nephew of SADRÁ JAYA SINHA, who was converted to the Jaina faith by the celebrated HÍMÁCHÁRYA): this prince attended to hear him preach, and, as was his custom, informed him that if he kept the *Púnam*, or the full moon, on the 14th of the month, he might remain, but if not he must depart. It happened that JAYASINHA was then repeating certain lines as his text, and therefore requested to be informed whether he would be allowed to conclude his discourse or not. CUMÁRA PÁLA not conceiving so apparently trifling a concession of any importance, gave him permission to proceed; and on returning to his palace, he mentioned the circumstance to HÍMÁCHÁRYA, who told him, on hearing the text, that he believed the lecture would take twelve years to its completion: this proved to be the case. However, CUMÁRA PÁLA, it is said, kept his promise, and even attended the A'CHÁRYA's discourse as long as it continued; and from this circumstance, gave this sect the name of *achala* or immoveable.

During the spiritual government of DHAMMARAT'HA SU'RI, in S. 1660, A.D. 1604, the separation of the sects denominated *Gowraca* and *Bhat't'uraca*, took place, the *Jatis* of those schisms not relishing the severity of the A'CHÁRYA's discipline.

There are three sects of *A'nchlias*: the *Bhat't'uraca*, *Gowraca*, and the *A'nchliá* proper. They boast that at some former periods three other sects of Jainas have been converted to their opinions, viz. the *T'hárolia Vam Guchch'ha*, the *Nágindrá Guchch'ha*, and the *Digambara Sálveys* of Pattan. The following peculiarities in their tenets are detailed:

1st. In common with the *Lúncá*, *Púnamiá*, *Sád'h Púnamiá*, and *Ágamiá* sects, they are said to keep the *Pac'hi* or full moon on the 15th instead of the 14th day, and to conclude the fast of the *Pajusan* on the 5th instead of the 4th *Bhád'arwasú.l.* The distinction arises from a close attention to the *Ti'ths* or lunar division of time, which is in some measure neglected by others.

2d. The whole of the *Tapá* and *Lúncá S'rāvacas*, when they attend prayers, or the lectures of their priests, use a mouth-cloth, and a *Púnjani* or small broom. The *S'rāvacas* of the *A'nchliás* do not.

They worship the images of the *T'irt'hancaras*, and acknowledge forty-five *Sútras*.

The *Carvā Miti*. The period at which this schism arose, is stated to be S. 1562, A.D. 1506.

The founder was a *Vanya* named CARVÁ SHÁH, an inhabitant of the village of A'ratwára near Siróhi. This man, being the disciple of a certain *A'charya* named PAICHANDA, made a request to him that he might be admitted into religious orders; the *A'charya* declining to qualify him, for the priesthood, he went to T'haranda, and attracting attention from the austerities of his *tapasyá*, founded the *Carvā Miti* sect. He died in S. 1564.

The chief peculiarity of this sect of Jains is, that they have no *Jatis*, their priests being *Vanyas*, denominated *Sáhji*, who are also called the twelve *Vrittidhári S'rāvacas*: they wear turbans like other *Vanyas*, and associate and eat with them, but live in a *pósál* or convent in celibacy. When they read prayers they take off their turbans, and cover their mouth with a cloth: like the *Lúncás*, they keep the *Pác'hi* on the 15th, and the *Pajusan* on the 5th *Bhádardásúd*.

The *Paichanda Guchch'ha*. This sect arose at Siróhi in S. 1565, A.D. 1509; they keep their fasts on the same days with the *Carvā Mitis*.

The *Púnamiá Guchch'ha*. This schism is said to have arisen from a mistake made by one of HÍMÁCHARYA'S *Chélas* or scholars, in S. 1159, A.D. 1103: the chief peculiarities of the *Púnamiás* are the same with those of the *Paichanda Guchch'ha*.

Sád'h Púnamiá. S. 1236, A.D. 1180; they are nearly similar to the above.

Dandirwáliá.

Trangáriá or *Tramgáriá*. S. 1200, A.D. 1144.

Cataca Súri.

Caca Súri.

Cacrási.

Cúlá Miti. S. 1532, A.D. 1276.

Bhásáriá. These are *Chípás*, or cotton printers, converted to Jains in S. 1616, A.D. 1560; they are said to be mostly *Lúncás*.

Cótlá Miti. S. 1114, A.D. 1058.

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Rúdúpáliá. S. 1225, A.D. 1169.

Janáde Ságara. S. 1687, A.D. 1631.

Sácar Miti. S. 1442, in some accounts 1570, A.D. 1386 or 1514.

Nágóri Sechó Miti. S. 1584, A.D. 1528.

Cáje Miti. S. 1570.

Páttan Miti, ditto.

A'tmá Miti, ditto.

Chámóndic. S. 1282, A.D. 1226.

The *Hímácháryá.* HÍMÁCHÁRYA, from whom this sect takes its name, was the celebrated author of the *Náma málá*, or Sanscrit vocabulary called *Héma Cósha*, and the *Pradhána* or minister of CU'MÁRA PÁLA,* the nephew and successor of SADRÁ JAYA SINHA, Rájá of Pattan.

The *Hímácháryá* sect took its rise in S. 1166, A.D. 1110.

The whole of the foregoing are of the division of Jainas, called *S'wétámbaras*.

The *Digambaras.* The origin of this sect appears involved in some obscurity : in some *Patávalis* it is ascribed to a certain priest named S'RÍ or TRÍ GAPTÁ ; and the date of its rise, S. 609 or A.D. 553 : in others, it is stated to have arisen 984 years after MAHÁVÍRA.†

In the list of the succession of the *Tapá* priests or *A'cháryas*, it is also stated that GÓDE MÁLI, or GÓSH MÁHIL, the first *Digambara*, lived about S. 608, or A.D. 552, and that he had four *chélas*, named CHANDA, CHANÁCA, NAURAT, and VÉDITE. Each of these instituted a separate sect about S. 620, or A.D. 564 : they were originally called *Vanvási*. This division is said to be most numerous in Rájpútána ; there are however some in Gujerat, as the *Hómbara* and other *Vanyas*.

The number of propositions forming the distinction between *S'wétámbaras* and *Digambaras*, are upwards of one hundred ; the chief of these are as follow :

* This prince, originally the *T'hácur* of Dát'hally, a village near Pattan, built the Jaina temple at Tárangá, as appears from the inscription on it.

† The separation of this sect took place in the time of BHADRA BÁHU', the eighth *A'chárya* from MAHÁVÍRA ; at that period it is related twelve successive years of famine occurred, and the Jainas were in consequence dispersed ; those who migrated eastward became *Digambaras*, and those westward *S'wétámbaras*.

1st. The *Digambaras* represent their gods perfectly naked, and without any kind of ornament.

2d. They allow only the ten *Múla Sútras* of the holy books of the Jainas to be original, and reject the rest.

4th. They say that the laity, or those who wear clothes and ornaments, the lowest classes of mankind, and women, cannot attain *mucti* or immortality.

5th. Their *Sád'hus* are expected to remain quite naked, and are allowed to possess only two articles of equipment: a fan of peacock's feathers, and a cup.

7th. They deny that RISHAB'HADÉVA was a *yúgala*, or that he married the widow of a *yúgala*.

8th. They deny that the *Tírt'hancaras* are subject to disease.

9th. They assert that it is better to die than to eat flesh or pluck fruits from the tree and eat them.

10th. The *S'wétambaras* say the minute portion of time called a *samaya*, cannot be divided: these, on the contrary, say it can, even to infinity.

11th. They consider it unlawful, under any circumstances, to kill a man.

12th. They say that it is not lawful for *Sád'hus* to take food from the house of a *Súdra*.

13th. Their *Sád'hus* do not carry wands, nor do they bore the ears of their novices.

14th. They believe that the mother of a *Tírt'hancara* has sixteen dreams indicative of the future greatness of the being she is destined to bring into the world: the *S'wétambaras* say only fourteen.

15th. That the *Jádú* tribe, from which most of the *Tírt'hancaras* are sprung, did not eat flesh or drink wine—the *S'wétambaras* say they did.

16th. They call the fast of the *Pajusan*, *Daslac'hini*, and it commences with them, when that of the *S'wétambaras* ends.

17th. They say that eight portions of the soul are pure from all connexion with *Carma*—the *S'wétambaras* say the whole is implicated with *Carma*.

18th. That penance and austerities cannot destroy the effect of *Carma*, or expiate crime.

19th. The *Digambara Sád'hus* eat out of their hands, not out of dishes.

20th. They say the *Tírt'hancaras* are not supreme gods, but only *Parama Gurus*, saints, prophets, or spiritual instructors.

21st. They will not allow women to perform religious ceremonies, or touch their images

22d. They say that only one *C'hánd'á* of the *Bharata Cshétra* will be destroyed at the end of the sixth *A'rá*.

On all these questions they are at issue with the *S'wétámbaras*.

The remainder of the eighty-four *Guchch'has*, or sects of Jains :

- | | | |
|--|---------------------------------------|--------------------------------------|
| 1. <i>O'sawál</i> , <i>Guchch'ha</i> . | sect is said to have | 44. <i>Chitráwál</i> . |
| 2. <i>Jeráwáli</i> ... do. | been founded by MÁL- | 45. <i>Vairá</i> . |
| 3. <i>Gangésrá</i> ... do. | D'HÁRÁ, a celebrated | 46. <i>Vijóhari</i> . |
| 4. <i>Jhírdiá</i> . | poet. | 47. <i>Cachóliá Cóhóliá</i> . |
| 5. <i>A'ntpúrá</i> or <i>A'npúrá</i> . | 25. <i>Pálliwál</i> . | 48. <i>Sáhcári</i> . |
| 6. <i>Bharwatchá</i> . | 26. <i>Coruntwál</i> . | 49. <i>Canársi</i> . |
| 7. <i>U'diwá</i> . | 27. <i>Nágbríá</i> . | 50. <i>Pínhtallá</i> . |
| 8. <i>Gúndwá</i> or <i>Gúdáyá</i> . | 28. <i>Dharma Góe súri</i> . | 51. <i>Révadiá</i> . |
| These are reported to | 29. <i>Mandúará</i> . | 52. <i>Dhóndápa</i> . |
| put gum or mastic | 30. <i>Nánawál</i> or <i>Nánwál</i> . | 53. <i>T'hamniá</i> . |
| in their mouths when | The <i>A'nehliá Guchch'ha</i> | 54. <i>A'nsúra</i> . |
| they pray, and from | is originally derived | 55. <i>Pálanpóra</i> . |
| this custom the appel- | from these ; they are | 56. <i>Gandúrá</i> or <i>Gan-</i> |
| lation is derived. | said mostly to reside | <i>gadára</i> . |
| 9. <i>Decáwá</i> . | at Udayapúra and its | 57. <i>Drivériá</i> from <i>Drá-</i> |
| 10. <i>Dhenmála</i> . | vicinity : their high | <i>virá</i> . |
| 11. <i>Múhádassiá</i> or <i>Mó-</i> | priests are called <i>Bha-</i> | 58. <i>Nágarcátiá</i> . |
| <i>harássiá</i> . | <i>táracá</i> , the inferior | 59. <i>Hansúriá</i> . |
| 12. <i>Dáriríá</i> . | <i>Mahátmás</i> . | 60. <i>Bhatnérá</i> . |
| 13. <i>Gújpálá</i> . | 31. <i>Sandirwál</i> or <i>C'han-</i> | 61. <i>Janhéri</i> and <i>Jan-</i> |
| 14. <i>T'hocwáli</i> . | <i>délá</i> . | <i>hárá</i> . |
| 15. <i>Maygúriá</i> . | 32. <i>Háttisamá</i> . | 62. <i>Bhínsáin</i> . |
| 16. <i>Jhárólá</i> . These, it | 33. <i>Madáhrá</i> . | 63. <i>Jaggáin</i> . |
| is said, have joined the | 34. <i>Súráná</i> . | 64. <i>Pattan</i> . |
| <i>A'nehliás</i> . | 35. <i>Cambáyatiá</i> . | 65. <i>Kumbú</i> . |
| 17. <i>T'hócrió</i> . | 36. <i>Súpáriá</i> . | 66. <i>Kinnójiá</i> . |
| 18. <i>Búcadiá</i> . | 37. <i>Mandliá</i> . | 67. <i>Súratíá</i> . |
| 19. <i>Májáhrá</i> . | 38. <i>Cúchípúrá</i> . | 68. <i>Shévatá Guchch'ha</i> . |
| 20. <i>Sáchórá</i> . | 39. <i>Jánglá</i> . | 69. <i>Ghógádhara</i> . |
| 21. <i>Cánciá</i> . | 40. <i>Chapriwál</i> . | 70. <i>Wághirá</i> . |
| 22. <i>Sidd'hántiá</i> . | 41. <i>Búsadá</i> . | 71. <i>Bisriá</i> . |
| 23. <i>Messániá</i> . | 42. <i>Váródiá</i> . | 72. <i>Sid'hpúriá</i> . |
| 24. <i>Máld'hára</i> . This | 43. <i>Dúvandanic</i> . | 73. <i>T'hútórá</i> . |

74. <i>Négamiá.</i>	89. <i>U'chilwal.</i>	104. <i>Gúrdáliá.</i>
75. <i>Sanjamiá.</i>	90. <i>Jángrá.</i>	105. <i>Sóhriá.</i>
76. <i>Sójantwál.</i>	91. <i>Chaprá.</i>	106. <i>A'súriá.</i>
77. <i>Várdiwál.</i>	92. <i>Devadaniá.</i>	107. <i>Jáagriá.</i>
78. <i>Móradwára.</i>	93. <i>Bijóhrá.</i>	108. <i>Jángdá.</i>
79. <i>Nágóla.</i>	94. <i>Cáchilá.</i>	109. <i>Bhapéniá.</i>
80. <i>Nádóla.</i>	95. <i>Rádóliá.</i>	110. <i>Cambójá.</i>
81. <i>Bharijiá.</i>	96. <i>Mócrá.</i>	111. <i>Vehriá.</i>
82. <i>Súrantwál.</i>	97. <i>Pantal.</i>	112. <i>Gógrá Guchch'ha.</i>
83. <i>Bhinmállá.</i>	98. <i>Carsaná.</i>	113. <i>Nángriá.</i>
84. <i>Dásarwá.</i>	99. <i>Réviá.</i>	114. <i>Sajjárá.</i>
85. <i>Gócwálá.</i>	100. <i>Dhandúpal.</i>	115. <i>Bardichá.</i>
86. <i>Bócriá.</i>	101. <i>Pantwáliá.</i>	116. <i>Mórandwá.</i>
87. <i>Kúriá.</i>	102. <i>Málpúrá.</i>	117. <i>Réshmiá.</i>
88. <i>Nángdráhá.</i>	103. <i>Góndiliá.</i>	

The following names are taken from a list in the *Mirát i Ahmadi* :

118. <i>Adsítyá.</i>	123. <i>Nácadac.</i>	128. <i>Sádbáliá.</i>
119. <i>Cócamál.</i>	124. <i>Nógrál.</i>	129. <i>Dicrá.</i>
120. <i>Dássiá.</i>	125. <i>Cúthipurá.</i>	130. <i>Púrantálaca.</i>
121. <i>Cájadiá.</i>	126. <i>Nágsóná.</i>	131. <i>D'hond'húca.</i>
122. <i>Bhawarájiá.</i>	127. <i>Díd.</i>	132. <i>Panjdáliá.</i>

Several lists of the *Guchch'has* have been examined and copied for the above. It may be remarked they all differ both in the number and names. Many of these sects, if ever they had existence, are not now to be discovered in this part of India.

It will be seen that many of these bear the same names with those of the *Náts* or tribes.*

* It will be evident that the designations of these *guchch'has*, as well as those of the *náts* or tribes, being quite popular, are not capable of being restored to Sanscrit forms.—G.C.H.

XX. *Description of a Jātrā, or Fair, which takes place annually at the Hot Wells, about fifty miles in a South-Easterly direction from Súrat. By the late Dr. WHITE.*

(Communicated by the BOMBAY BRANCH of the ROYAL ASIATIC SOCIETY.)

Read 21st of January 1832.

Súrat, 22d of April 1810.

CURIOSITY to be a spectator of the celebration of a religious ceremony, which was reported to draw together annually from 100,000 to 200,000 persons, led me to the resolution of visiting the Hot Wells, situated at the foot of the hills, about fifty miles in a south-easterly direction from this city.

The place is vulgarly called *Unei*, or in full, and more definitely, *Dévaki-Unei*, i.e. "the Divine Heat," from a provincial vocable signifying 'heat,' but in Sanscrit and the *Purána*, which records the fable of its history, *Ushna-udaki*, a compound from *Ushna* warm and *Udaka* water.

The waters are resorted to annually at the full moon of *Chaitra*, which occurred this year (1810) on the 19th of April, at which period alone the temperature of them is affirmed by the Bráhmans to be miraculously lowered for the purpose of enabling the pious devotee to avail himself of their holy and purifying influence in the form of a bath. This belief, as well as that of its divine origin, has attached to this natural phenomenon a veneration of the most profound description, and a train of circumstances minutely recorded in the *Scanda Purána*, with all that extravagance of fiction and wildness of fable, characteristic of Hindú mythology, impresses the minds of the natives with respect and awe, and conciliates that facility of credence which they so readily bestow upon all their religious histories. The sum of the particulars, as recorded to have happened at a very remote period, is as follows :

SÍTÁ, the wife of RÁMA, or RÁMA CHANDRA the seventh *Avatára*, having been stolen by the demon RÁVAN'A, in the form of a beggar, near Nashuk Trimbuck, the hero, by the advice of the *Rishis*, resolved on performing a

yajna or sacrifice, as a previous step to attempting her recovery by force of arms. At this time he had arrived at the village of *Anadipura pattan*, (now called Anaval, (a *cós* from the wells), in search of his wife. The want of Bráhmans to officiate at the *yajna* obliged him to send his *Dúta* (envoy) HANU'MÁN to the banks of the *Gangá*, for a supply of the holy ministers. These on being summoned objected to emigrate, as they would be deprived of the sacred water, but their scruples were removed by the princely messenger, who insisted on his master's power to supply the deficiency, or create a substitute. On the arrival of 18,000 of them (miraculously transported by HANU'MÁN) and their asking for the means of ablution, RÁMA let fly an arrow on the ground, and the production of the hot springs was the immediate effect. He further excited their astonishment at the phenomenon, by alleging that a peculiar snake (*S'ésha Nága*) communicated the heat by his breath. The *Purána* adds, that on the Bráhmans refusing the offer of a pecuniary reward for their services, the god, being filled with wrath, pronounced their permanent doom to till the ground and live by the sweat of their brow, and accordingly to this day they practise their agricultural labours, as well as persist in refusing benefactions from any quarter. They are denominated the *Bhátéla* tribe, and do honour to their religion by their industry and diligence.

They indeed hold an inferior rank to the other Bráhmanical tribes, and agreeably to Hindú etiquette the estimation in which they are held is proportionably less, but as this inferiority arises only from the omission of certain ceremonies, and their ignorance of the *Sástra*, it is rather artificial than essential, and their general probity and application to agricultural pursuits entitle them, in the eye of reason, to a very elevated rank in the scale of civilized communities. Their humble labours are the source of life and comfort to their lordly namesakes of the sacerdotal class, who have only the privilege of idleness, and the arbitrary pretensions of prescriptive custom, to oppose to such substantial merit. It is true that they do not observe the preliminary ablutions before every meal, and have recourse to the bath only once a day, which they find fully adequate for all the purposes of health and cleanliness. Like CATO of old also, they do not think the practice of the severer virtues can be injured by the moderate excitement of vinous beverage, and to this they add the forbidden inhalation of the fumes of tobacco. They are rarely found to the northward of the Narbada, or to the southward of Gandaví; and they are most numerous as we recede from

these boundaries, and approach the central spot of their first settlement, *viz.* *Anadipura*, the modern Anaval.

In prosecution of the purpose above stated we left *Súrat* on the 15th of April, and reached the wells on the 17th in the afternoon. The face of the country traversed in three days march had no features distinguishing it from the champaign appearance of *Gujerat* in general. It was studded here and there with villages, and these most commonly surrounded with a similar description of trees and shrubbery. Among the former the *Mango* (*Mangifera Indica*), *Ním* (*Melia Azadirachta*), Banyan trees, such as the *Vatá* or *Barí* (*Ficus Bengalensis*), and *Pippala* (*F. Religiosa*) were most frequent and nearly in equal proportions. The *Bér* (*Zizyphus Jujube*) both as a tree and its dwarf variety, were also frequent. The fruit of this is the true *Lotos* of the ancients, which is indigenous in most parts of India, but arrives at the greatest perfection in *Gujerat*. Here and there a solitary group of *Palmyras* or the *Tála* tree (*Borassus flabelliformis*), reared their majestic heads and agreeably diversified the scene. The waste spaces along the roads, the angles and sides of the fields were thickly set with the wild date and the *Bárwál* (*Mimosa Arabica*); the latter from its crowded state and the great demand for firewood, seldom reaching its full stature. We passed four considerable streams, all with classical titles, and each the subject of some peculiar fable of the adventures of heroes or demigods. Their names are, 1st. *Mandakini*, at Malecpur, twelve *cós* distant; 2d. *Purna*, at Manha, six *cós* further on; 3d. A sister branch, and with the same name, at Vulvarra, twenty-five *cós* from *Súrat*. Three *cós* more brought us to the fourth, *Ambica*, near to its descent from the hills, where it winds round the *Ushna-udakí*. The two first had broad sandy channels and high banks. The two latter were intercepted by rocks and rocky islands, which, with the aid of alluvial contributions, had attracted a variety of shrubs and stunted trees, thereby presenting a picturesque and pleasant landscape.

During this trip the thermometer generally rose to 93° at noon, and 97° at three P.M.; at six A.M. it dropped gradually as we approached the hills from 80 to 70 at the village of *Veal*, within two *cós* of the wells. As we proceeded, the increasing crowd of pilgrims from the converging lines of their respective routes, all rejoicing and inspired with a cheerful anticipation of the purifying virtues of the waters, bestowed upon the scene an appearance of bustle and gaiety of the most exhilarating kind.

A distant and confused murmur announced the vicinity of the *Játrá*, and

soon afterwards a number of huts, in all stages of preparation, formed of the verdant materials so abundantly furnished by the contiguous woods, saluted and gratified the sight. The decorum, harmony, and peaceable demeanour which pervaded the assembled multitude, though in a constant state of motion and various degrees of fluctuation, created a most favourable impression of the Hindú character. Their moderation and orderly habits cannot be better illustrated than by the fact, that during the seven days of the *Jâtrâ* no act of violence or theft was heard of. The *tout ensemble* of this exhibition presented a picture on which the mind delighted to repose, and, by generating kindred associations, carried it back to the golden age, when the mutual confidence of men superseded alike the curb of law and the regulations of police; a state of society which the Hindús ascribe to the *Avatâra* of their beloved RÁMA, the author of the miracle whose anniversary they were now celebrating.

The streets, being solely allotted to shops, were constructed on a very simple plan, and, following the custom of most Hindú towns, were very narrow. The main street skirted semicircularly round the wells as a centre, and was about a quarter of a mile in length: from this two or three led down to the wells, two or three more were extended from the opposite side into the fields, and the spaces comprised within these limits were filled up with the visitors, variously grouped, but chiefly by castes and villages, while others were dispersed more irregularly, as the shade of lofty trees or clumps of shrubbery at different distances had attracted their choice.

The general mode of association appeared to be, as observed above, by castes and villages; and sometimes a slight outline of thorny branches pointed out the stations of the more respectable parties, composed of Bráhmans and wealthy Banyans. Artizans of every description improved their pious errand by bringing along with them different wares, the produce of their own industry, the sale of which communicated to the scene of devotion a degree of sprightliness and complacency highly animating.

This admixture of profane and sacred pursuits added to the number of visitors a great many individuals entirely unconnected with the ceremony. The greater proportion of the last consisted of Parsís and Musalmáns: the former, as customary, had solely engrossed the sale of spirituous and intoxicating liquors, and seemed to reap a plentiful harvest from the deplorable attachment of the inferior castes to that kind of intemperance. Several companies of jugglers, musicians, and dancers contributed their efforts to

enliven the scene. Religious anchorets, of various descriptions and designations, were seen strolling about, and a band of pure Gymnosophists (*Sannyásís*) paraded in the crowd without feeling themselves, or exciting in the minds of the mixed multitude, the smallest idea of immodesty. Referring to European habits of decency, this may be considered as a striking example of the influence of manners and education over those associations of sentiment which define the limits of virtue and vice; and here it may be remarked, that such instances of Indian customs may have given rise to the unfavourable and immoral constructions expressed in the first notices of India handed down to us by the father of history, the venerable and veracious HERODOTUS.

The shops were stored with commodities equal in quality and variety to those of the large towns in Gujerat. On some stands were exposed to sale grapes brought all the way from Aurungábád (a distance of two hundred miles by the road), in high perfection, and of a delicious degree of maturity.

The hot wells, which are the *primum mobile* of all the crowd and celebrity above described, though of little external show, and their temperature, are now to be spoken of. In the *Bráhmaṇa Cund'a*, or tank, which is a place faced with stone, measuring about forty feet by thirty, the thermometer stood at 111° of Fahrenheit; but on one side of this space there was a small square of wood-work enclosing the chief spring, and here the heat rose to 115°: the average depth of the *Cund'a* was three feet. About twenty yards distant was the *Dhéra Cund'a*, so called from the caste to whose use it was exclusively allotted. The size of this was about seventy feet by fourteen; but the heat was 120°, which prevents the visitors from making use of it as a bath, and the substitution of ablution by small pot-fulls is had recourse to.

As the religious prejudices of the natives are particularly flattered by the belief of miracles, the priests have not neglected the application of this principle in the present instance; for they affirm, and implicit credit is given to their *ipse dixit*, that it is precisely on the day of the full moon of this month *Chaitra*, and on no other in the course of the year, that the water becomes diminished in temperature to such a degree, as to admit of the performance of the rites of purification by the pilgrims.

The harmless tendency of this and similar opinions renders their refutation neither a matter of moment nor interest. Indeed the imputation of

moral blame, if not cruelty, might attach to any serious design of unveiling a deception which is accompanied with nothing positively vicious, while, on the contrary, it proves an abundant source of joy and festive recreation to a numerous and industrious population; inspiring, at the same time, the pious devotee with the happy hope of a felicity beyond the grave. Had such always been the harmless exhibitions of priestcraft, the philosophical poet would never have had occasion to exclaim—

“Tantum religio potuit suadere malorum.”

With every sentiment of human charity, the writer may be allowed to state from his own experience, that he found the water indicating at the supposed crisis of the miracle a somewhat greater, in place of a less temperature, on the day of the full moon than during the two preceding days. This, however, might have depended on the heat of the atmosphere being greater that day, and of course absorbing less caloric from the pool. Had it been otherwise, the fact would be easily explicable from the circumstances occurring at the baths, which must have considerable influence in modifying the heat; for at certain times hundreds of men, women, and children throw up the water with their hands and pots, scattering it in every direction, and the refrigerating effect is accountable for on well-known principles.

It is also clear, that as the water is by many degrees hotter than the human body, and as the spring is not rapid, that the crowded and successive immersion of so many people acts as a powerful refrigerant, and speedily must bring down the temperature to the mean proportion betwixt the maximum above stated and the heat of the human blood, which in the healthy subject never exceeds 98° of Fahrenheit.

For the convenience of future travellers actuated by similar curiosity, it may be observed, that by halting at Veval, in a small garden belonging to the *Patél*, where there is a palm-thatched cottage, and plenty of shade on the outside of it for their cattle and followers, they will enjoy equally all the pleasure and variety of the *Jâtrâ*, free from the annoyance of the crowds, dust, and noise. The moderate ride of half an hour from thence furnishes an agreeable recreation in the morning and evening, and will be amply sufficient for satisfying their wishes, in all the particulars connected with the simple ceremonies above described.

N O T E.

As the subjoined version of the legend in the *Scanda Purâna*, which describes the origin of the Hot Wells near Veval, taken from the Glossary appended to Dr. DRUMMOND's Illustrations of the Grammatical Parts of the Guzerattee, Mahratta, and English languages, under the article "*Oonæe* or *Oonay*," differs almost entirely from that contained in the preceding account by Dr. WHITE, it is deemed advisable to insert it.—G.C.H.

" The hot well, situated about fifty English miles S.E. of Surat in the territory of the Gaikevâd or Guicowar Raja, is called *Dwrekee Oonæe*. Regarding its origin and use, the following is an epitome framed by Sheva Bhatt of Surat from the Skunda Pooraw, to the truth of which the practice of the present age bears testimony; and it may be here stated that similar stories regarding all Indian antiquities of human art or wondrous works of nature, obtain credit.

" ' The Divine Ramchunder having set out on a tour through the earth to visit all its celebrated temples, came to the village Unnâvul, where there is a *Ling* (vivifying symbol of *Mahadêva*), close to which, perceiving a pure stream called *Umbeeka*, he determined to perform a grand religious ceremony. The officiating priests being nominated, they complained that the water of the river then was intensely cold, and begged his Highness to procure, if possible, warm water for them to bathe with, thereupon, his Highness, according to their desire, plunged his arrow of fire into the earth, whence instantly sprung up a quantity of warm water, which formed itself into a pan or bason, and became a place of great note. It has accordingly come to pass, that an annual *Jattrâ* or holy fair hath been held on the *Poorneem* of *Cheiter*, (*i.e.* on the day of the full moon in April) there, when whosoever as shall bathe in the said fountain, and distribute in charity (alms to needy objects), and feast Brahmins, and offer oblations to ancestors' manes, beseeching the Almighty, shall obtain forgiveness of their sins in former states.' "

XXI.—*An Account of the Sheep-Eater of Hindústán.* By Major-General
HARDWICKE, F.R.S., M.R.A.S.

Read 21st of July 1832.

THE communication which Major-General HARDWICKE has the honour to lay before the ROYAL ASIATIC SOCIETY OF GREAT BRITAIN AND IRELAND, though not describing an occurrence of recent date, he trusts may yet be found sufficiently interesting to claim a place in the Transactions of the Society. General HARDWICKE has frequently heard the subject mentioned of late, but has found very few persons who were inclined to attach credit to it, owing to its remarkable deviation from the usual course of nature; and having himself not only seen the man designated “the Sheep-eater,” and witnessed an exhibition of his carnivorous habits, but made notes and drawings in elucidation of the facts as displayed in the presence of many officers of the military station of Futtehgurh and the native inhabitants of the surrounding villages, on the 3d of March 1796; he now proceeds to subjoin the substance of his memorandums, in explanation of the accompanying plate.*

Early on the morning of the above date, the Sheep-eater, attended by his *guru* or spiritual father, appeared in front of the assembled crowd. He had with him two living sheep; and after a short harangue to the people, he commenced his attack on the first sheep, by seizing its fleece with his teeth; and having held it thus for about a minute, he then, by a swing of his head, flung it on its back on the ground.† In this position he held the animal down as at No. 2. At No. 3, he is seen in the act of tearing open the abdomen, which he effected with his teeth only, by stripping off the skin from the flank to the breast; he then removed the intestines, and thrust in his head to drink the collected blood, as shewn at No. 4. This employed him a minute or two, when he withdrew his head, and gazing around in expectation of applause, presented a very savage appearance

* See Plate 12.

† See the Plate, Fig. 1.

besmeared with blood, as shown at No. 5. He next proceeded to strip off the rest of the hide; separate the ribs, disjoint the limbs, and detach the head from the neck; and after collecting them together, he rubbed every part with a quantity of dust: by this operation, he said, he dried up the blood, and enabled himself to tear the meat from the bones and sinews with greater ease; he disregarded the quantity of dust which every portion retained, and swallowed one mouthful after another, with all the dirt adhering, without the least hesitation. The concluding part of this performance was the collecting a quantity of the leaves of the plant *Madár*,* of which he chewed a considerable number, but swallowed only the milky juice which flowed from them. While thus employed, which did not continue many minutes, he was seated on the ground, as represented at No. 6; and in No. 7, he is drawn addressing the spectators, holding in his hand a branch of the *Madár*, and offering to eat the second sheep: the tall aged figure with him is a correct delineation of his spiritual father or *guru*, with whom he had been travelling for many years. They were both Hindús, and natives of the province of Rájputána.

The old man was upwards of six feet in height and slender, the muscularity and fulness of his figure being worn down by age, which, according to his own statement, was upwards of one hundred years; he was very dark, considerably more so than his *protégé*: his hair almost white, that of his head he wore coiled into the shape of a turban, while his beard, which was not the least remarkable peculiarity about his person, reached to the ground when flowing loose; but he generally kept it twisted, and carried the lower end in one hand with a rosary of beads, and in the other, a long walking cane.

The notoriety of the "Sheep-eater" having reached the city of Lucnow, an English gentleman, resident at the court of the *Nawáb*, was induced, by the report of his extraordinary feats, to send a servant for him to that part of the country in which he had for some time sojourned; and where, from his savage propensities, he was much dreaded by children and by the timid amongst the natives of the place, who believed that when sheep were

* The *Asclepias gigantea* of botanists. It is used by the natives of India for many medicinal purposes: among the number, it is useful in removing warts and other excrescences. It is the milky juice they apply, which flows plentifully from all parts of the plant when broken or bruised; and on the present occasion, the Sheep-eater said he ate it to assist digestion.

not to be had, he would devour a child, if he could steal one. He obeyed the summons, and was liberally provided for the journey, as well as attended by the gentleman's own servant; and on his arrival at Lucnow, a party of more than fifty ladies and gentlemen assembled to witness an exhibition of his extraordinary powers; amongst whom were the late Mr. Sackville Taylor and Mr. Cherry, Major-General William Palmer, Major-General Claude Martine, Major-General Rawstorne, and many other officers of the Hon. East-India Company's army, the present Right Hon. Sir Gore Ouseley, Bart., and the gentleman above mentioned, at whose delightful villa they partook of a sumptuous *déjeûné*.

It may be proper to give some idea of the quantity this monster could devour at one of these exhibitions. He commonly ate two of the small-sized sheep of the Doáb, the weight of which, when not stall-fed, did not exceed eight or nine pounds per quarter; on the present occasion, however, the gentleman above alluded to had provided the sheep from his own stock, and one of them was of larger size, being a breed peculiar to the country on the north side of the river Gogra, and weighing from twelve to thirteen pounds per quarter: this he finished with as much ease as he had the first. It was observed that he carefully collected together the ill-picked bones, sinews, and other fragments; and when asked what he intended to do with them, he replied, they were to furnish him and his *guru* with a dinner in the evening; and that he always took his usual daily meals, whether he had had his sheep in the morning or not.

(Signed) THOS. HARDWICKE,
Major-General.

The Lodge, South Lambeth,
July 20, 1832.

NOTE.

THE following is extracted from a work entitled 'Sketches of India.*' It evidently alludes to the same singular person, and is so far of consequence as it affords another testimony to the accuracy of the facts detailed in the paper of Major-General HARDWICKE; although it differs from it in some minor particulars, erroneously calling the Sheep-eater a Musalmán Fakir; while the *guru* is not mentioned in it at all. As it is evidently only the account that *tradition*, after a lapse of twenty years, had preserved of this monster's powers, which were obviously the effect of disease, it will be considered a tolerably faithful corroboration of General HARDWICKE's narration.—G.C.H.

* 8vo. London, 1816.

“ A few years since, there existed in Lucknow, in the person of a Musselman Faquir
 “ an extraordinary instance of voracious appetite, remarkably evincing how near, when
 “ unrestrained by civilization, the human appetite approaches to that of the brute. The
 “ man of whom I speak was a resident in the capital of Oude, and it was his peculiar
 “ custom, by a display of his edacious powers, to solicit at the expense of strangers the
 “ gratification of his appetite. From a particular friend of mine * he requested and
 “ obtained a fine sheep; seizing its two fore-legs, he drew the animal, suspended in the
 “ air, towards him, threw back its legs with all his strength, and laid the creature both
 “ dead and open in an instant. His first care, on the sheep being thus exposed, was to
 “ cast away the entrails and drink the blood. To do this more effectually, he always
 “ buried his head in the animal's body, and which custom, if it preserved any of the
 “ blood from being spilt, rendered his appearance horrible and disgusting, by coagulating
 “ and matting his hair. He then with his hands and teeth (never employed a knife) tore
 “ off the skin, with the same instruments tore and devoured the flesh, and having nicely
 “ picked every bone, loudly petitioned for a second sheep. The disgust excited was
 “ however, too great to admit of a second performance, and the cannibal regretted that
 “ he had not received wherewithal to satisfy the importunate cravings of his maw.

“ Asoph-ud-Dowlah, the predecessor of Saadut Ali, and uncle to the present Nuwaub
 “ of Oude, bestowed a jagheer of the annual value of three thousand rupees, on this
 “ singular character. It was on a day of great festivity in Lucknow, after devour-
 “ ing three sheep successively, and losing three teeth in the encounter, that he was
 “ blessed with this munificence of his prince, as a reward for his prowess in the *ars edendi*.
 “ A squalid emaciated appearance was the characteristic of this Faquir; and with his
 “ diseased appetite, we may naturally infer, that the quantity of food proved an obstacle
 “ to its nourishing him.”—Page 160.

The writer adds, that some of the descendants of this cannibal were still to be seen
 (1813-14) in Lucknow.

* “ Claude Russel, Esq., one of the present Judges of the Court of Appeal and Circuit for the division of Benares.”

XXII.—*A Letter from Lieutenant-Colonel WILLIAM MACBEAN GEORGE COLEBROOKE, of the Royal Artillery, F.R.S., M.R.A.S., &c. &c., transmitting three Fac-similes of Inscriptions discovered on the Island of Ceylon.*

Read 19th of January 1833.

To GRAVES C. HAUGHTON, Esq., M.A., F.R.S., Secretary to the Royal Asiatic Society of Great Britain and Ireland.

London, 12th of January 1833.

SIR :

I have the pleasure to communicate to the ROYAL ASIATIC SOCIETY of GREAT BRITAIN AND IRELAND, the copies of some inscriptions* which were taken from a rock in the district of Batticaloa in the island of Ceylon, by Mr. N. J. MOYAART, of the Civil Service, and transmitted to me by that gentleman. The character is, I believe, unknown ; but on reference to the ninth volume of the Asiatic Researches, pages 272 and 278, a character resembling this appears in some ancient inscriptions copied by the late Colonel COLIN MACKENZIE from a Jaina temple at Calyani.

On

* Vide Plate 13.—The plan of the Hot Spring, which is given on the plate over the inscriptions, has been retained, because it is so placed in the original drawing ; and it is not improbable that the inscriptions may bear some reference to it, particularly as they are not above a mile and a-half from the spring. The natives in general attach something of a sacred character to these phenomena ; the hot wells near Trincomalee, for instance, are said to have been a favourite resort of the sage AGASTYA, and medical writings attributed to this Hindú Esculapius are still held in the highest estimation over the whole of the Southern peninsula of India. Another example of the sacred character of these springs is afforded in the account of the hot wells near Surat, by the late Dr. WHITE, which is inserted in the present volume of the Transactions. The spring, which is the subject of this note, is apparently one of those referred to by Dr. DAVY, in his account of Ceylon, page 46. The temperature of the water is there stated to be too high to be borne by the hand, and sufficient to dress meat and vegetables ; a use to which it is applied by the natives. The spring is constantly bubbling, and the specific gravity of a specimen of the water examined by Dr. DAVY was 1·0011.

384 *Lieut.-Colonel COLEBROOKE on Inscriptions discovered in Ceylon.*

On shewing the Batticaloa inscriptions to two distinguished Orientalists, I was informed that the same character is to be met with in the north-western parts of India ; a fact which tends to prove that a connexion existed between those countries and Ceylon at a very remote period.

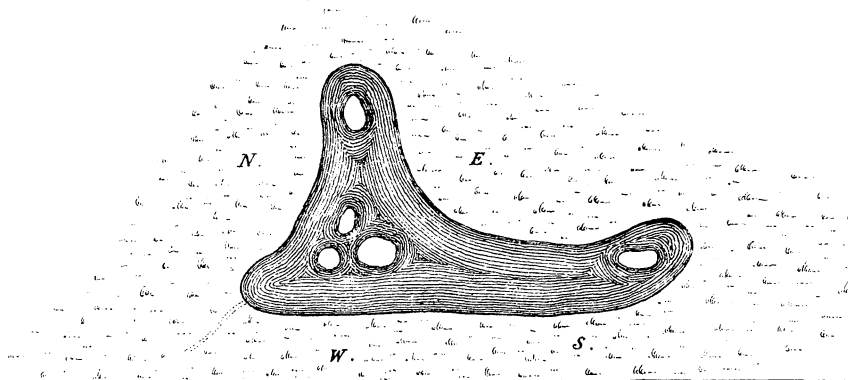
I remain, Sir,

Your obedient servant,

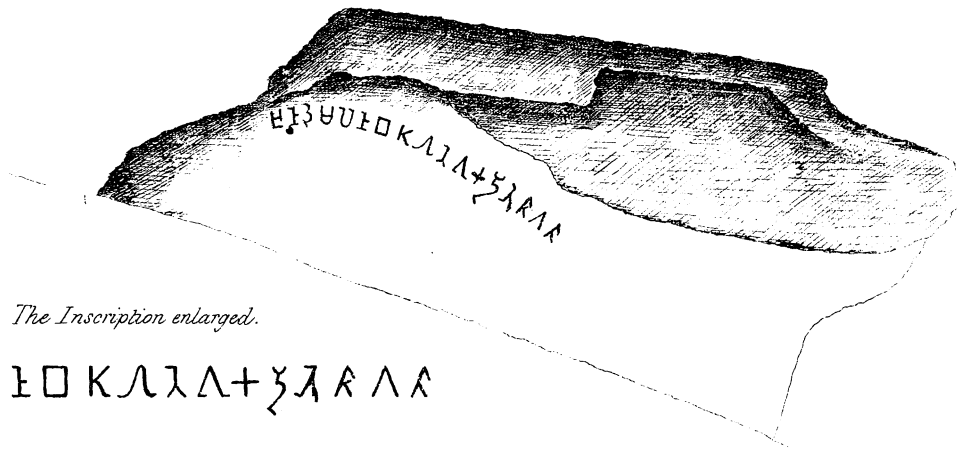
(Signed) W. M. G. COLEBROOKE.

Plan of a Hot Spring; and Fac-similes of Inscriptions found near Batticaloa, in Ceylon.

Plan of a Hot Spring at Batticaloa, in Ceylon. Temperature 130° Fah.°



Sketch of a Rock with an Inscription, on a rocky Hill called Coselanemalle, near Batticaloa in Ceylon - in the Province of Eravoor.



The Inscription enlarged.

ΕΙΞΘΥΙΟΚΛΛΛ+ΞΛΛΛ

Inscription on another large Rock, about fifty feet in length - the Inscription being about eighteen feet from the Ground.

ΛΒΗΙΛΥΛΒ)ΙΥΟΥΛΛΥΛΛΘΙΕΛΛΘΛ+ΧΒ'ΛΛΒΛΛΛΛ

Inscription found on a horizontal Rock on the same Hill.

ΩΔΥ'ΖΖΔΛ)Δ
 ΗΗΗΗΖΖΔΩΥΩΔΩΥΔ
 ΥΖΔΩΔΥΗΥΥΖΩΖΥΟΕΥΛΔΣΔ
 ΥΔΥΖΥΖΔΖΩΖΔΥΔΥΔ
 ΥΕΥΔΔΔΔΔΔΔΔΔΔ
 ΖΔΥΛΛΔΔ

{ Lithographed by J. Nethercift, for the Royal Asiatic Society from the Original Fac-similes by a native Artist. }

XXIII. *A Letter containing some Remarks on an erroneous Reading of a sentence in the Cufic Inscription on a Grave-stone brought from Dhalac-el-Kibeer, and described in the second volume of the TRANSACTIONS of the ROYAL ASIATIC SOCIETY. By GRAVES C. HAUGHTON, Esq., M.A., F.R.S., SECRETARY to the SOCIETY.*

Read 20th of April, 1833.

To HENRY THOMAS COLEBROOKE, Esq., F.R.S., F.S.A., Director of the Royal Asiatic Society, &c. &c. &c.

London, 10th of April 1833.

SIR :

Since the publication of my translation of a grave-stone, written in *Cufic* characters, and printed in the last volume of the Transactions of the Society, my attention has been drawn by friends to the fact, that the words in the thirteenth line, which I had read *حمد الله*, "praise be to God," should really be *رحمها الله*, "May God have mercy upon her." As this last reading is the right one, I beg leave, through your kindness, to make it known; for the error, though of no great importance to the general import of the inscription, deserves to be noticed.

By a reference to my remarks on the subject of the stone,* it will be seen that I was then struck at the apparent deviation in the particular formulary expression which I took it to be. In decyphering the stone, I had not only to contend with the disadvantageous light in which it was placed; but the ground and letters being of the same uniform colour, and the writing in such low-relief as scarcely to be obvious to the touch, the difficulty of tracing it out may be easily imagined. The practised eye of the artist, however, who, besides the choice of light, had only to trace the forms of the letters without attending to the sense, succeeded in discovering and delineating that which my less perfect vision was unable to distinguish.

* Page 577 of vol. II.

If I had had the good fortune to have made my translation from the drawing instead of the stone, I should have been saved much painful effort, and could not have fallen into this error, as the letters in it are well defined, and in strong contrast with the ground of the stone.

I have the honour to be, Sir,

Your most obedient humble servant,

(Signed) GRAVES C. HAUGHTON.

XXIV.—*An Account of the great Historical Work of the African Philosopher*
IBN KHALDÚN. By the Chevalier JACOB GRÄBERG de HEMSÖ, M. A.,
F.M.R.A.S., late Swedish and Norwegian Consul for Morocco and Tri-
poli, Knight of the Sardinian Order of St. Mauritius and Lazarus.

Read the 21st January 1832.

* الدول لهم اعمار طبيعية كما للاشخاص

Ibn Khaldún, P. I., B. III., ch. 12.

FEW nations, either ancient or modern, have surpassed the Amazirgs, or lineal descendants of the primitive inhabitants of northern Africa, in power to produce a more ingenious and contemplative writer than the one now before us. And yet this writer, equally profound as an historian and as a statesman, has hitherto been so little known in Europe, that the majority of our Arabic scholars have but very confused notions of his scientific and literary merits, and to many, even his name is almost unknown. In the East, and in Africa, however, the great historical work he has composed, has given him a celebrity which no lapse of time, nor any vicissitude of events, will ever impair or lessen.

His names and titles are in Arabic : *Wáli-ad-dín Abú-Záid Abd-ar-rahmán Ben-Mohammed al Hadhramí al Ishbílí*; but he is better known by the single patronymic name of *IBN KHALDÚN*, the etymology of which is most likely derived from the circumstance of his father having, in the full possession of his health and faculties, attained an extreme old age. This old man, surnamed *KHALDÚN*, was a native Amazirg or Berber; but his wife, descending from a family of the Arabian province *Hadhramát*, made her son adopt the surname of *AL-HADHRAMÍ*. The second surname, *AL-ISHBÍLÍ*, he assumed because he had prosecuted and accomplished his studies at the university of Seville in Andalusia, in which city, it would also appear, that his mother was born. He came into the world at Tunis, in the year 1332 of the Christian era, and passed his youth, and many years of his manhood, in Egypt. He then served a short time under *TÍMÚR*, as chief justice at Damascus, and made a journey with that conqueror to Samarkand; after

* For the translation, see page 394, chap. 12.

which he returned to Cairo, where he became *kádhí-al-kodhá*, or supreme judge, and died in the year 1406, at the advanced age of seventy-four. Besides his great historical work, of which I propose to offer a short analysis in this paper, he had achieved several other performances in natural history, politics, jurisprudence, and the science of languages; but they are now either lost, or but very little known. His principal and most remarkable work is the "History of the Arabs, the Persians, and the Berbers." The Arabic title of this work is : كتاب العبر وديوان المبتدأ والخبر في أيام العرب والعجم والبربر ومن عاصرهم and translated into English, signifies "A Book containing instructive Examples, and a Collection of the subject and the predicate respecting the History of the Arabs, the Persians, and the Berbers, as well as of other contemporary Nations." The whole composition is commonly called *Tárikh Ibn Khaldún*, or "The Annals of IBN KHALDÚN."

The first oriental scholar of Europe, my respected friend the Baron SILVESTRE DE SACY, has given in Vol. XXI. of *La Biographie Universelle, ancienne et moderne*, a very complete and eloquent account of the author and of his book. He has moreover published and translated into French several pages of this work, both in his *Chrestomathie Arabe*, and in his edition of A'BDULLATÍF's Description of Egypt. Those pages are taken from the first part of the work, which the author himself entitles : مقدمه في فضل علم التاريخ , that is to say, "Prolegomena respecting the excellence of the science of History;" which first part is often considered as a separate work, independent of the two other parts of the great history; the former of which comprehends the history of the Arabs and other nations, from the beginning of the world to the eighth century of the Hegira; the latter, the history of the author's own nation, the Berbers or Amazirgs, and of other indigenous nations of northern Africa, also an account of the various tribes, and of the dynasties who have succeeded each other in this remarkable part of the globe.

Notwithstanding IBN KHALDÚN has not altogether renounced the prejudices of his religious tenets, he has done so in a much greater degree than any other Arabian historiographer. He is, at least, in no way tainted, either with the predilection of his brethren in religion, for all that is Arabian, or with their blind zeal, for the superiority of their nation above every other. Far from judging of the Arabs with partiality, he often rather errs on the opposite side. His principal object, it would appear, has been to write the history

of the African dynasties who derive their origin from the Berbers; for, with respect to the Prolegomena, it is pretty well ascertained that he wrote them, as well as the whole second part of the Work, after having finished the third part, which contains the History of the Berbers.

I do not believe there exists, in any European library, one complete copy of all the three parts of this valuable work. Of the first, or the Introduction, some more or less correct copies are to be met with in England, France, and Germany; but of the second and the third, the Baron DE SACY himself confesses, in his biography of the author already alluded to, that he did not know whether a single complete manuscript copy existed in the whole extent of Europe.

On my first arrival at Tangier, and during my subsequent residence there, from 1816 to 1822, I spared neither pains nor expense to obtain a copy of this valuable work; but, in spite of all my exertions, the thing appeared to be impossible. A very learned *Sharíf* from Wazán, who had lived a long time at the university of Fez, assured me, that only two copies were extant throughout the whole of *Moghrib-al-Aksá* or the empire of Morocco, namely, one in the mosque of *Al Karúbín* at Fez, and the other in the sanctuary of Shella near Salee. In the mean time, I heard it whispered that a good copy of the Prolegomena might be met with in the principal mosque of Tangier; and by means of a considerable bribe, I succeeded in persuading one of the officiating *Túlibs* or priests, to transcribe it for me. But, how painful was my disappointment, on finding that this dear-bought transcript, although it extended to 478 pages, contained the half only of the *Mokaddameh* or Prolegomena. Instead of six books or sections, which this First Part of the Work ought to contain, the manuscript given to me had merely the two first books and somewhat more than the half of the third. Both promises and bribes were unavailing, to induce the *Tálib* to let me collate my copy with the original manuscript, so that I cannot even say whether I have got all that could be obtained. The priest, however, contended that his original did not contain one syllable, yea not one single letter, more than what he had transcribed. Of this I was further assured by the abovementioned *Sharíf*, who moreover affirmed, that of the two MS. copies of which he had spoken, only that one in the mosque of Fez was really complete, because it was the selfsame autograph manuscript which the Author, in his Preface, says he inscribed and presented in person to the mosque of *Al Karúbín*; but that the other

one at Shella was so far defective, that the whole of the sixth book of the Prolegomena was entirely wanting, as well as part of the history of the Arabs and Persians. Upon my earnest entreaty, and promise of a liberal reward, the *Sharif* pledged himself to procure me a correct transcript of the former, and for this purpose he left Tangier for Fez at the end of 1821. Had I then remained only a few months longer in the empire of Morocco, the great object of my wishes and endeavours would have been attained. But alas! "Man proposes and God disposes": my violent and tyrannical ejection from Tangier annihilated, as well in this respect as in many others, my legitimate and fondest expectations: لا تحزن فالذي قضى الله يكون. "Be not sorrowful, for that which God has ordained must come to pass."

Removed to Tripoli, a poorer but more civilized part of Barbary than Morocco, I did not cease to continue my pursuits; and I so far succeeded as, by means of a very clever and accurate copyist, to obtain a transcript of the other parts of the work from the only complete copy extant at Tripoli, which was in the hands of the then Secretary of State for Foreign Affairs, my learned and excellent friend the *Sharif* SIDI HASSUNA D'GH'AÏS; who, among the Musulmans of the present age, and more especially among the African followers of Mohammed, deserves to be noticed as a prodigy of learning, knowledge, and civility; since in this most amiable person are combined, the politeness of the courtier with the rare talents of the statesman, and with elaborate improvement of the mind, the gracefulness of a man of fashion. He was brought up a profound Arabic scholar, and having spent several years of his youth in England and France, he thereby laid a most excellent foundation for learning and skill in several European languages, in politics, and in polite literature.

But to return to my subject; who could fancy himself happier than I was, after so many years' exertions, to be finally possessed of the whole of this invaluable treasure. But what is happiness on this side the grave! A new misfortune hurried me away from Tripoli in 1828, almost as suddenly as from Tangier, and turning my joy into sorrow, confirmed the old saying, that "Every thing upon earth is transitory and perishable." Amongst a quantity of books and manuscripts which, during the passage from Tripoli to Leghorn, on board a Sardinian vessel, were soaked with salt water, and consequently destroyed, were my second and third volumes of IBN KHALDÚN's historical work. My only consola-

tion was that the fourth and largest volume, containing the end of the second, and the whole of the third part, or the history of the Berbers, being by chance put into a separate box, had not suffered any damage, so that I have, at least, the satisfaction of possessing the most precious part of the manuscript. The loss of the remainder was, however, the more galling, as it could not be repaired, even through the politeness and personal friendship of SIDI HASSUNA, who would gladly have procured me a new transcript; for the copy, the only one in the possession of any body at Tripoli, from which the two volumes now lost were transcribed, was by this nobleman, a very short time before my departure, lent to one of the European consuls at that residence, who is since dead, but who, dabbling in every kind of scholarship, and contrary to all honesty, sent away the manuscript to Europe, without saying a word to its unsuspecting, and too obliging owner. I hasten, therefore, to communicate these notes to the Royal Asiatic Society, whilst the outline and the contents of the two lost volumes are still fresh in my memory.

The preface to IBN KHALDÚN'S Prolegomena contains much profound reflection upon the usefulness and the importance of history as a science, and upon the manner in which annals and chronicles ought to be digested, and committed to writing. After this preface follows an essay on historical criticism, in which the Author enters into a discussion on various occurrences, which have been believed as true, and often related as such, on the authority of the major part of the Arabian historians, although they really are either adscititious or totally unfounded, or, at least, highly improbable. Of these he chiefly enumerates: 1. the journey of the Israelites across the desert, with an army of six hundred thousand warriors, a number which he esteems exaggerated; 2. the conquests of the *Tobbas*, ancient *Hamyarite* kings of Yemen; 3. the fable concerning the paradise of Irem; 4. the preposterous assertion, that a love affair betwixt JA'FAR and the sister of HÁRÚN-AR-RASHÍD brought about the ruin of the Barmacides; 5. the scandalous and defamatory anecdotes from the private lives of several khalífs; and 6. the story about the origin of the *Edrisites*, and the *Mogh-rabine Aghlabites*. He next enters upon an elaborate defence of MAHADÍ, the first ancestor of the *Mohavides*, wherein he lays hold of this opportunity, to expose the ridiculous assumption of some teachers in the mosques and would-be antiquaries, who, in the more modern times of Islamism,

have, on their own private authority, passed sentence upon several men of eminence, who flourished during the first centuries after the Hegira. In conclusion, he examines the mechanism of languages, and gives the rules which he has laid down and followed, in the orthography of the foreign words and proper names, which occur in the course of his lucubrations.

The commencement of the work bears, in my manuscript, the Arabic title : الكتاب الأول في طبيعة العمران في الخليقة وما يعرض فيها من البدو والمخضر والتغلب و الكسب والعلوم والصنایع ونحوها والمعاش وما لذاك من العلل والاسباب, that is, in English, "The first volume : of the Nature and Institution of Society, and of all that concerns both the rude and civilized State of Mankind ; of Conquest and Acquisition ; of Sciences, Arts, and Handicrafts ; and finally, of Industry, Economy, and other analogous Subjects, the results of Knowledge."

This First Part, or Introduction, comprehends six books or sections, of which BOOK I. treats upon the moral culture of mankind in general, and is divided into the six following chapters :

1. The union of mankind into society is indispensable.
2. Description of the inhabited parts of the globe, according to EDRÍ's geography of climates ; with the elements of astronomy, according to the system of PTOLEMY.
3. Of the influence which the temperate zones and climate have, over the colour of the skin, and the propagation of the human race.
4. Influence of climate over the passions and the constitution.
5. Of the influence that plenty, or want of food, has over men's manners, and particular constitution of the mind.
6. Of the contemplative life, as a consequence of fasting and abstemiousness ; with remarks on divinations, visions, dreams, witchcraft, &c.

BOOK II.—Of the savage state of mankind ; of the Bedouins, and other wandering nations ; consisting of twenty-nine chapters.

1. The division of people into wandering (nomades, Bedouins) and sedentary (citizens, Arabs) is of necessity founded in nature.
2. The Arab nation is, by nature, the most erratic of all people.
3. The wandering state and pastoral life, preceded the city life, and were the first states of civilisation.

4. Wandering people have less corrupt manners than those who live in cities.
5. They are also braver.
6. Citizens lose their good qualities with their liberties.
7. The genuine family power, or paternal authority, is only met with among tribes.
8. The family power is grounded on the extent of the tribe.
9. The care of preserving genealogies and titles of descent, or lineage, is found among savage people, and particularly amongst the Arabs.
10. Of the intermixture of pedigrees and lineages.
11. Dominion is a consequence of family power and parental aristocracy.
12. Real nobility is a consequence of family power. All other sorts of nobility are artificial and accidental.
13. The rank of servants is determined by the nobility of the family.
14. Nobility of merit, or hereditary pre-eminence, does never hold out in the same family beyond four generations.
15. Rude nations are the best conquerors.
16. The end of power is dominion.
17. Luxury and love of comfortable living, fetter the progress towards dominion.
18. The tendency to submission and humility, are also obstacles in the way of dominion.
19. The imposts and tributes to which a nation submits, make it contemptible.
20. Great virtues presage dominion; great vices, the contrary.
21. The more uncivilized the nation which attains dominion, the greater the extent of its power.
22. If the principal branch of a family lose dominion, another of its branches will exercise it, so long as the family power remains in force.
23. Vanquished people adapt themselves to the character, the laws, and the manners of their conquerors.
24. A vanquished nation degenerates, and soon decays.
25. The Arabs have conquered none but flat, open countries.
26. They do not at all understand the art of preserving the state of culture, and civilization, of the countries they conquer.
27. None but prophets can rule the Arabs, and become their lawgivers
28. The Arabs know less than any other people of the science of government.

29. Tribes living in the Desert need greatly the assistance of people inhabiting cities.

BOOK III.—Of dynasties, monarchy, Khalifat, ranks, and dignities. Sixty-one chapters.

1. The founders of dynasties are in particular need of the support derived from the heads of families.

2. A dynasty, already firmly established, can do without this support.

3. A rising dynasty, assured of foreign support, can also dispense with the aid of family power.

4. The great monarchies have been founded by prophets, and were theocracies.

5. The ascendancy of religious authority will always, at the foundation of the monarchy, overweigh the influence of family power.

6. Nevertheless, the religious power cannot do without the assistance of paternal authority.

7. The power of each empire is circumscribed by certain limits, beyond these, it will, and must decay.

8. The prosperity and glory of an empire are dependent on the greater or smaller number of the public officers or servants of government.

9. Absolute power can never be firmly established in a country occupied by several powerful tribes.

10. A well settled dominion will always tend to the enjoyment of quiet, and the conveniences of life.

11. This tendency is the presage of its decline and downfall.

12. Empires have their natural life like individuals.

13. Of the progress of dominion ; passage from the savage to the civilized state.

14. Agriculture in a rising dominion, far from weakening it, will increase its strength.

15. Of the various changes which the same dominion is liable to undergo, in process of time.

16. The monuments which are left us of ancient empires are adequate to the grandeur, and original power of those empires.

17. Foreign assistance is often called in, to counteract the overbearing influence of some too powerful families.

18. Of the foreign supporters of a throne.

19. Of the powerful influence and ascendancy of foreigners, who hinder princes from governing by themselves.
20. They very often claim all the liberties and rights of sovereignty.
21. Of sovereignty, or absolute power.
22. The too great severity of sovereigns endangers absolute authority.
23. Signification of the titles *Imám* and *Khalífah*.
24. Of the qualities requisite to the office of *Imám*.
25. Of the various Mohammedan sects and parties dividing the faithful, with regard to the office of *Khalífah*.
26. Of the decline of the Khalifat, and its change into unmixed monarchy.
27. Signification of the word *Bai'a*, or inauguration of the *Khalífah*.
28. Of the power of appointing a successor.
29. Of ecclesiastical offices and spiritual hierarchy.
30. Of the title *Amír-al-mú'minín* or commander of the believers.
31. What the Pope, the bishops, the priests, and the judges are among the Christians and the Jews.
32. Of the great offices and dignities of court and state, under sultans, emperors, and kings.
33. Of the office of *vezír*.
34. Of the cabinet or privy council.
35. Of the department of finances.
36. Of ambassadors and foreign affairs.
37. Of the sovereign's life-guard, and the direction of the police.
38. Of the navy.
39. Precedence with regard to rank betwixt the sword and the pen.
40. Of the ensigns of royalty and absolute power, *viz.* the throne, the coinage, the seal, the purple, the banner or standard, the travelling-tent, and the gallery of honour in the mosques.
41. Of the war department, and the art of ranging men on the field of battle.*
42. Sources of the finances; increase or diminution of the revenue of the crown.
43. Of customs and imposts upon merchandize.

* Here ends my Mauritanic manuscript of the Prolegomena. What follows has consequently been taken from the transcript I obtained at Tripoli, before I had the misfortune of losing it, as I have already stated.

44. The too great inclination of the sovereign to practise commerce is highly prejudicial to the state.

45. Precisely when the empire is at the highest pitch of prosperity and glory, the great families are the most wealthy.

46. Of the emigration of the wealthy families, who apprehend the confiscation of their property.

47. The revenues of the state suffer, when the sovereigns diminish their munificence.

48. Oppression and concussions are the ruin of dominion.

49. The average or statute labour is one of the most pernicious kinds of oppression.

50. Of usury and unlawful interest.

51. Of the different degrees and institutions of chamberlains, and other officers in the sovereign's household.

52. Of the division of an empire into several principalities.

53. Against the declining age of an empire there is no remedy.

54. Of the causes of the decay and downfall of dominion.

55. Causes of ruin arising from too great riches.

56. Empires rise and increase; but arrived at the limit of their enlargement, they decline.

57. Of new dominions founded upon the ruins of old ones.

58. A too numerous population must ultimately produce scarcity of provisions.

59. In every state a political code is of absolute necessity.

60. Of MAHADÍ, the last *Imám* or anointed High Priest, whom the *Shia's* believe to be still living.

61. Of astrological and cabalistical predictions concerning the duration of monarchies.

BOOK IV.—Of Cities and other Establishments of civilization. Twenty-two Chapters.

1. The monarchy or kingly government is older than the congregation of mankind into cities, which was the result of monarchy.

2. Optimates and rich people choose rather to live in cities.

3. Large cities and fortified towns were never founded but by great sovereigns.

4. Some remains of antiquity are so grand and extensive, that more than one dynasty, or at least more than one reign, must have been requisite to perfect them.

5. When the necessary precautions are neglected in laying the foundations of a large city, it will feel the effects of it for ever.

6. Of capital mosques.

7. There are few large cities in the province of Africa, properly so called, and in Moghrib-al-Aksá.

8. Royal palaces and fortified castles, built after the rise of the Islám, are very few in number.

9. The monuments erected by the Arabs are not of great durability.

10. How cities fall into decay.

11. The greatness and the beauty of cities have comparative relation to the well-being of the citizens.

12. Of the prices of eatables.

13. Wandering tribes abhor living in cities.

14. The wealth or the poverty of a state is always proportionate to that of its cities.

15. Of the advantages resulting from landed property.

16. Rich citizens must of necessity adhere to men in office.

17. The more or less successful advancement of public affairs, always follows the flourishing, or decreasing condition of the empire.

18. The highest pitch of luxury is the corruption of manners, which carries along with it downfall and ruin.

19. The capital of a state declines, and falls away with the empire.

20. There are arts and handicrafts which are peculiarly limited to certain cities.

21. The wandering tribes are always at war with each other.

22. Of languages, their nature, and distinctions.

BOOK V.—Of Arts, Manufactures, Trades, and other means of livelihood or subsistence. Thirty-two Chapters.

1. Definition of what is meant by acquisition, livelihood, and salary for labour.

2. Different ways and means of livelihood and acquisition.

3. Servitude is not a natural means of acquisition.

4. Of hidden treasures, and of those who make a business of discovering them.
5. High offices lead to riches.
6. Humiliation and submission are also means of growing rich.
7. The offices of judges, *indms*, and schoolmasters are not lucrative.
8. Agriculture is the lot of the lowest class of the people.
9. Of commerce.
10. Of exportations.
11. Of monopolies, or engrossment of commodities.
12. When the prices of goods are low, the merchants do not profit.
13. To whom commerce is suitable, and to whom not.
14. Merchants are generally accused of being deficient in elevated and liberal ideas.
15. Arts and handicrafts cannot be learned without teachers.
16. The greater or smaller perfection in the arts, depends on the higher or lower degree of civilization.
17. The consistency of the arts and handicrafts, depends entirely on the more or less diffused civilization of the country.
18. Arts and manufactures always thrive, according to the number of individuals employed in them.
19. The decay of the state carries with it the ruin of the arts.
20. The Arabs have very little skill in arts and manufactures.
21. The individual who excels in one art will hardly be eminent in any other.
22. Division of the arts.
23. Of agriculture and the breeding of cattle.
24. Of architecture.
25. Of joinery.
26. The arts of the tailor and the weaver.
27. Of midwifery.
28. The art, or science of healing.
29. The art of writing.
30. The arts of the bookbinder and the papermaker.
31. Of music and dancing.
32. A certain perfection in the arts of writing and computation, commonly inspires a prepossession towards those who have acquired the command of it.

BOOK VI.—Of Sciences and their encyclopedial division.

This book is not divided into a regular number of chapters, but contains, in about fifty neat paragraphs, a most elaborate compendium of all the sciences at that time cultivated by the Arabs; laid open and subdivided into regular classes, by means of a highly systematic method, which would do honour even to the first encyclopedist of our age. Among these paragraphs, the most remarkable for profound learning and extensive erudition, are those that expound algebra, the mathematics, astronomy, navigation, natural history, and chemistry. This sixth book is wanting in most of the copies, and forms a considerable portion of the third part of the *Mokaddameh* or Prolegomena.

From this summary or outline we may form some idea of the information conveyed by these Prolegomena. Moreover, all the chapters and paragraphs are interspersed with a great number of select examples and curious anecdotes, drawn from the annals of the Arabs, the Persians, the Berbers, and other ancient and modern nations. Few oriental learned works, therefore, can be compared to this masterly composition; nor can any other have so great a claim to the honour of a complete translation into a European language. Were my life not so far advanced, and had not adverse fortune lately checked my literary ardour, I should perchance have taken courage to translate into French, or Italian at least, this First Part of IBN KHALDÚN'S excellent performance. But what do I say? My zeal makes me almost forget that I have irretrievably lost the latter half of this first part, together with nearly the whole of the second.

The style, however, in which the original is composed, may possibly deter more than one Arabic scholar from a similar attempt. Excessively laconic, it often becomes obscure and scarcely intelligible, by the too abrupt transitions, and frequent omissions of intermediate ideas. The Turks have a very good translation of these Prolegomena, or rather a commented paraphrase, whose author, the famous MOHAMMED PARÍZÁDEH, has attempted to remedy the inconvenience alluded to, by not only developing the ideas of the original, but also adding a great many elucidations and separate remarks of his own. By these additions, the interpretation has swollen to a volume at least two-thirds larger than the original. This work of PARÍZÁDEH is continually studied throughout the *Othmánlí* empire, not only by all the ministers and statesmen of the Porte, but likewise by the Greek princes, and

by all the dragomans who have a love for learning and literature, and whose services and knowledge are employed in the public affairs of the empire.

THE SECOND PART OF THE WORK

contains, as I have already stated, the history of the Arabs, the Persians, and other nations, from the creation of the world until the end of the eighth century of the Hegira, or to the year 1398 of the Christian æra. Its Arabic title was, in my manuscript : الكتاب الثاني في اخبار العرب والعجم واجيالهم و دولهم منذ مبتداء الخليقة الي هذا العهد وفيه الالمام لبعض من عاصرهم من الادم المشاهير , مثل التبط و السريانيين و الفارس و بني اسرائيل و القبط و يونان و الزوم و الترك و الافرنج , that is, in English : “ Volume the Second, containing the History of the Arabs and the Barbarians, their Tribes and Dynasties, from the beginning of the Creation down to the present Time; with the most credible accounts of several other remarkable contemporary nations, viz. Nabathæans, Syrians, Persians, Israelites, Kopts, Greeks, Romans, Turks, and Franks or Europeans.” With regard to the primeval history of the Arabs, their emigrations to Asia and Africa, the branching and spreading of their tribes, their conquests, the progressive corruption of their language, &c., no other writer is likely to be found who, with greater sagacity in his investigations, more solid learning in his criticism, and more entertaining variety of erudition in his narration, has performed his task in so exquisite a manner as IBN KHALDÚN. The fourth or last book of this history is especially of immense value, containing an equally new and interesting account of the origin and settlement of the Arabian tribes, who, in Africa, or in other regions, have more or less forgotten or corrupted the language and manners of their ancestors, for which reason they are called in the East : عرب المستعجمه , that is, literally translated, “ language-corrupting Arabs,” or such whose speech is scarcely intelligible. The former three sections give a description, 1. of the genuine Arabs, عرب العراء who live in towns; 2. adventitious or adopted Arabs, عرب العربة who live in the fields; 3. foreign Arabs, عرب المتعرب or عرب المستعرب foreigners who have adopted the language, the manners, and the religion of the Arabs. GOLIUS, in his excellent dictionary, calls them *Arabes facti et adscititii*.

This second part of the work is exceedingly rare in Europe, and I verily fancied myself the only Christian who possessed a copy of it, excepting the one that was purloined from my friend SIDI HASSUNA D'GHA'is,

which must exist somewhere in France, where the purloiner died some months ago. This man, I am confidently informed, had the impudence to ask a most noble and revered friend of mine an enormous sum of money for the manuscript. But still more scarce is

THE THIRD PART OF THE WORK,

comprising the History of the Berbers; yet I know that a tolerably correct copy of it exists in the library of the University at Cambridge.

It would neither become me, nor accord with the object of this paper, to give a complete analysis of this invaluable history, especially as any thing of the kind could not be performed without giving at least a translation of the various rubrics or arguments placed at the head of more than four hundred chapters or divisions which compose this volume, and which extends to seven hundred and seven pages in folio. This however would be nothing else but a useless skeleton, or a dry list of words and proper names, without the least positive utility. On the other hand, I know that the late Mr. SCHULTZ has given, in the *Nouveau Journal Asiatique* of Paris for August 1828, a translation of the first chapter of this book; I shall therefore confine myself to a view of the first fourteen chapters, which in my manuscript form the introduction to this most precious portion of IBN KHALDÚN's composition.

The Arabic title of this third part of the work runs as follows: الكتاب الثالث في اخبار البربر الامّة الثانية اهل المغرب وذكر اوليتهم واجيالهم منذ مبتداء الخليقة و لهذا العهد و ذكر الخلاف الواقع بين الناس في انسابهم which may be translated in English: "Volume, or Book the Third: History of the Berbers, the second People inhabiting Africa, and Description of their Origin, their Divisions, and their Dynasties, from the beginning of the Creation until the present time; and first of all, an Exposition of the different Opinions held forth by Men about their Origin."

Chapter 1. Genealogy of the Berbers, and their different tribes, descended from the two great stocks BERNAS and MADRGIS. The seven tribes derived from the first, called *Beránís*, were the *Azdljeh*, the *Masmúdeh*, the *Awaríeh*, the *Ajiseh*, the *Katámeh*, the *Sanhájeh*, and the *A'rirgeh*, to whom some authors have added the *Lamatheh*, the *Haskúreh*, and the *Kazúleh* or *Gazúleh*.

The *Beránís* were the descendants of BER, a son of MAZIRG, and grand-

son of CANAAN In the translation of Mr. SCHULTZ, the name of *Mazirg* is written *Madhirg*, with a ð; but in my manuscript it is uniformly written with a j. And it is most probable that from *Mazirg* the Berbers derive their ethnical name of *Amazirg* or *Amzighs*. The *Madrgís*, who are also called *Batár*, from the plural of *Abtár*, a surname given to their first forefather MADRGÍS, were the offspring of another BER, the son of KÍS, a son of AILAN, and divided themselves into four great branches: the *Addaseh*, the *Nefúseh*, the *Zárlseh*, and the sons of LÁWÁ the elder. They all descend from ZAJÍK, a son of MADRGÍS, and their pedigree, as well as those of the *Beránís*, are represented in the manuscript by two regular trees of consanguinity.

As to the primitive origin of the Berbers, after having laid open and reviewed the different opinions advanced by his predecessors, the author fixes ultimately upon the conviction that they descend from CANAAN, son of SHEM and grandson of NOAH. The name of their real founder is MAZIRG or MAZIGH. The Canaanites of Palestine were their kinsmen and allies, and descend from KASLÚJÍM (CASLUHIM in the Bible), a son of MISSRAIM and grandson of SHEM. He contends that the Sanháfeh and the Ketámeh are not Berbers; and he believes them to be akin, at least, to people of Arabian origin. Finally he explicitly asserts, what their manner of living, their dwellings, and their language sufficiently evince, that, with the exception of the two tribes just now mentioned, the Berbers are a people totally distinct from the Arabs.

Chapter 2. Of the most ancient settlements of the Berbers in Afrikieh and Moghrib-al-Aksâ, with a general description of this latter region, and of Bajiya and Kostinie (the modern state of Algiers); which description has been taken, almost word for word, by Leo Africanus in his account of Northern Africa.

Chapter 3. Of what is really ascertained through ancient and modern events concerning the passage of the Berbers from their savage state to a certain degree of civilization; and further of their dominions, and their dynasties.

Chapter 4. Of the assembling of the Berbers into political and constitutional societies, both before and after the first establishment of Islamism, down to the dominion of the Aghlabís in Africa.

Now follows the real History of the Berbers, from which I shall only extract the contents of the first ten sections or chapters.

1. The history of the Berbers *Al-Batár*, their origin, division, tribes, &c. according to their own records ; and firstly of the tribe *Nafúseh*.

2. Of the great tribe *Nafzáweh*.

3. Of the tribe *Lawáteh*, derived from *ABTÁR*.

4. Of the tribe *Bení Fatan* (my manuscript has *Fäin*), descended from *ZARISEH* by his eldest son *THAMSEH*.

5. Of the *Zowáweh* and the *Zowágheh*, who are likewise descended from the great and numerous tribe *Zaríseh*.

6. The annals of the tribe *Miknáseh*, and of all its clans and branches sprung from *WARSTAF* which still exist among the tribes of *Zaríseh*, and of the countries possessed by the *Miknáseh* in the two *Moghribs*, especially under the dynasty *Bení Wasúl*, kings of *Sajalmása*.

7. Of *Bení Abi'l-Afiátí*, kings of *Tasúl*, descended from the *Miknáseh*, and of their conquests and dominion.

8. The annals of the *Beránis*, and firstly of the *Hawwáreh*, their division, tribes, and branches, with an account of the spreading of their clans in the provinces of *Afrikieh* and of the two *Mogh'ribs*, *al-Ausat* and *al-Aksá*, or the modern states of *Algiers* and *Morocco*.

9. Of the *Azdájeh*, the *Mostáseh*, and the *Ajíseh*, who are descended from *BERNAS*, and how they propagated themselves in *Africa*.

10. Of the tribe *Ketámeh*, and how they were greater, nobler, and more civilized than other Berber tribes, and how they gave chiefs and rulers to the other clans of the nation. Here the author proves that the *Zowáweh* are really a clan of the tribe *Ketámeh*, and consequently children of *BERNAS* and not of *MADRGIS* or *ABTÁR*.

Then commences the history of the *Sanhájah*, their tribes and dominions as well in *Africa* as in *Spain*, which are described with great accuracy and very circumstantially, in a series of more than sixty chapters ; after which the annals of the other tribes are unfolded more or less circumstantially, as the recorded events and the revolutions seem to require. The third chapter of the *Sanhájah* annals contains an extremely interesting and valuable topographical description of the modern empire of *Morocco*, and particularly of those parts of *Daran* or *Deren* (mount *Atlas*) which were anciently, and are still inhabited by the *Amazirg* tribes of *Masmúdeh*, *Bargwáteh*, *Gomara*, *Bení Asámí*, *Bení Edrísí*, *Bení Hamsúd*, *Bení Viryargal*, and others, who, at the time of the conquest of *Africa* by the

Arabs, partly professed the religion of Moses; whilst others were either Christians or heathens, worshippers of the sun, the moon, the fire, &c. This section or chapter, which is very material to the history of Morocco, seems to have been little used, either by Arabian or other historiographers, who have attempted to collect and lay open what has happened in ancient times, amongst the nations who occupy the summits and the sides of the Moroccan Atlas, and the two kingdoms of Tandja and Sebtah, so famous during the middle ages. In this part of the work, as well as every where else, IBN KHALDÚN occasionally offers the most curious and valuable information concerning the northern parts of Soudán, or the land of the Negroes, and of the warfare and the conquests made by the Berbers to the south of the Great Desert. In one word, among all the numerous Arabic and other Oriental manuscripts that are mouldering in the rich libraries of Europe, and still more, amongst all those that have hitherto been published, with or without translations, there is not one that offers such an assemblage of worth, rarity, importance, general utility, and extensive learning, with respect to the history of Africa, as this most excellent work of A'BD-AR-RAHMÁN IBN KHALDÚN. And I do not consider myself going too far in asserting, that the skilful and learned Arabic scholar who would undertake to make an abridged and commented translation of this classical work, into a generally known European language, would reap everlasting honour and praise, and at the same time, in a high degree, deserve well of the whole commonwealth of letters.*

Florence, June 11, 1831.

* The Rev. Professor Lee, is now engaged on a translation of this work, which is to be published by the Oriental Translation Fund of Great Britain and Ireland.

XXV.—*Description of the Wild Dog of the Western Gháts.*—By Lieut.-Col.
W. H. SYKES, of the Bombay Army, F.L.S., F.G.S., &c.

Communicated by the Branch ROYAL ASIATIC SOCIETY of BOMBAY.

Read the 4th February 1832.

THE very limited accounts of the varieties of the Wild Dog to be met with in SHAW's Zoology, in BLUMENBACH's admirable Manual of Natural History, and in the splendid edition of CUVIER's *Règne Animal*, now publishing in England, in REES's Cyclopædia, and in one or two other works within my reach, lead me to believe that the accompanying drawing and description of the Wild Dog of the Western Gháts may prove acceptable to the Society.

In SHAW's Zoology, the only description of a Wild Dog is that of the "*Chien Sauvage de Ceylon*," by VOSMAER. Our Wild Dog is readily distinguished from this variety by its greater size, and by its having a bushy tail. In BLUMENBACH's work, general mention only is made of the Wild Dog, without any particular description of it. In REES's Cyclopædia, mention is made of Wild Dogs being found in large troops in Congo, Lower Ethiopia, and towards the Cape of Good Hope; some are said to be red-haired, with slender bodies and tails turned up like greyhounds; others resemble hounds of various colours, have erect ears, are of the size of a large fox-hound, destroy cattle, and hunt down antelopes and other animals: they run swiftly, go in large packs, attack lions, tigers, and elephants, and commit terrific ravages amongst the sheep of the Hottentots; but there is not an individual description.

In the "*Règne Animal*," the *Dhole* of the East-Indies and Southern Africa is described as being like the *Dingo* or half reclaimed dog of New Holland, but differs from it in the hairs of the tail not being bushy. In this particular it differs also from the Wild Dog of our Gháts, but corresponds nearly in colour with it, being of a uniform bright red. The *Dingo*, or New Holland half wild dog, has the head and elongated snout of a fox; in its other proportions it agrees with the shepherd's dog, which by some zoologists is considered the nearest of the domesticated dogs to the

primitive race. The fur of the *Dingo* is composed of silky and woolly hairs, and is of a deep yellowish brown colour, lighter on the under part of the body; it is about two feet six inches long, and two feet high.

It will be observed, that in the above distinguished works, descriptions are given of only two varieties of wild dogs: those of Ceylon, and those of India and Southern Africa.

I have deemed it necessary to preface my description with the above extracts, to facilitate comparison, and the estimate of the truth of the inference I have drawn, that the Wild Dog of the Western Gháts is hitherto an undescribed species.

In the afternoon of the 15th of May 1828, when encamped at *Bhíma Shancar*, the source of the *Bhíma* River, in the Western Gháts, some of the *Cohli* inhabitants of the village, who had been in my employ for some days hunting game, brought to me the Wild Dog, of which the accompanying is a drawing;* they called it *Colsum*. The creature was dead, but still warm; they stated that they had followed a pack of them in the morning, through the dense jungle, and ultimately coming unawares upon them, had struck down the dog they brought by a blow on the head with a stick, the creature not having activity sufficient to effect its escape. We were enabled to account for this inactivity on opening the stomach, by finding that the dog had completely gorged itself with the remains of a deer; and the bones of the feet of some digitate animal were also in the stomach. As it lay dead on the ground, its principal characteristics were: 1st, the length and narrowness of the head, the parietal bones insensibly approaching each other, and the jaws being considerably elongated; 2dly, the length and slenderness of the body; 3dly, the magnitude and strength of the limbs compared with those of other dogs of nearly the same size as the Wild Dog, and with the body of the dog itself; 4thly, the length of the neck; 5thly, the magnitude of the feet and toes. The expression of the face was that of a coarse ill-humoured *pariah* dog. The pupils of the eyes were round (the irides brown), ears large, erect, broad above and somewhat rounded at the tips, interior surface of the ears hairy, and the hairs whitish. The posterior margin of the ear has a lobe, fissure, or double edge, as in the domestic dog. The fore feet have five toes, and there is an elevated, rounded, horny process behind the articulation of the wrist, as in the *Shakal*,

* See the accompanying Plate.

and in two domestic dogs in my possession, one of them a powerful *Brinjari* of the greyhound form; the other out of an English spaniel by a *pariah*: the claws are short, stout, and black. The colour is a uniform bright red, from the tip of the nose to the insertion of the tail, and to the extremities of the toes; a shade or so, however, lighter under the throat, on the chest, belly, and on the inner surface of the fore legs down to the wrist. The tail is bushy, the hairs red at the base, but black at the tip; the fur consists of silky and woolly hairs, the latter very short, without any disposition to curl.

The proportions of the animal are: from the tip of the nose to between the ears, seven inches and three-quarters; greatest width of the head, three inches and a half; length from between the ears to the insertion of the tail, twenty-six inches, of which the neck is eight inches; length from the claws to the articulation of the ulna with the humerus, ten inches and a half; toes two inches long by eight-tenths of an inch high; tail eleven inches; height of the animal about seventeen inches; the extreme length from the nose to the tip of the tail, is three feet eight inches and three-quarters. I have stated the height indeterminately, from some provoking difficulties having occurred to prevent me setting the animal up correctly. From the extreme rarity of specimens of the Wild Dog, I was particularly anxious to prepare the skin properly: it was removed from the body with every possible care, leaving in the necessary bones of the head and limbs; and the interior surface was fully imbued with arsenical paste. The skin was then filled with dry grass, and the specimen put into a basket with some skins of the *moschus memina*, to be set up on my return to Poona. Having taken up my monsoon quarters, the skin of the dog was steeped in tepid water, and the usual process of stuffing with cotton and putting in wires was attempted; to my utter surprise, the skin in many places opposed as little resistance to pressure or tension as wetted brown paper would have done. The cause of the decomposition was perfectly inexplicable, as the skins of the small deer, similarly prepared and similarly circumstanced, were found to be quite sound. The misfortune effectually prevented me from setting the dog on its legs, with the body at its natural elevation, and I am necessitated, therefore, to speak of its height indeterminately. The head is in excellent preservation; the body is sufficiently so to give its true form and magnitude, and the limbs, although the skin has given way in certain places, have

so defined an outline as to admit of their being drawn correctly; the feet are quite perfect.

The drawing has been executed from actual measurements, but in the uncertainty of the height of the animal relatively to its length, I caused the drawing to be considerably foreshortened. It does not, therefore, show the real length of the body; but in *the position* in which it is represented standing, it may be relied upon for its correctness.

From the above description it will be observed, that the Wild Dog of our Gháts cannot be identified with any dog of which a description is given in the works of natural history to which I have alluded. It differs from the *Dhole* in having a bushy tail; from the "*Chien Sauvage de Ceylon*" in its bushy tail and superior size; from the African Wild Dog (likened to a large fox-hound), in its inferior size; and from the *Dingo* of New Holland, in its inferior height, general proportions, and colour; from the *Shakal* it is readily distinguished by its superior size, length of body, size of its limbs, and by its colour.*

If naturalists will not admit of there being several *species* of the Wild Dog, we must class the *Colsun* as an hitherto undescribed variety.

The *Cohlí* inhabitants of the Gháts appear to be quite aware of the existence of troops of these Wild Dogs in their jungles and fastnesses; but from the fabulous stories they relate of them, they cannot be familiar with their habits and economy. They state that these dogs hunt the royal tiger in large packs; in the combat they urine on their own tails and switch them into the eyes of the royal beast; the tiger is blinded, and in consequence is ultimately vanquished. Independently of the testimony of these people, respecting its being the habit of Wild Dogs to hunt in packs, on the day the specimen described was brought to me, GOPAL, one of my *hamáls*, and two other men, when going for water to a reservoir in the jungle, had their path crossed by ten of these dogs, apparently in full chase. The general testimony of travellers is in favour of their gregarious and venatic habits.

The habitat of the *Colsun* would appear not to be confined to *Bhíma Shancar* and its neighbourhood, as one of my office people from *Cittúr*, in the Southern Mahratta country, instantly recognized it as an inhabitant of

* Lieut.-Colonel Sykes subsequently named the *Colsun*, "*Canis Deccanensis*."—*Vide* Proceedings of the Zoological Society, July 12th 1831. "*Can. rufus, subtus pallidior: cauda comosa pendente: pupilla rotundata.*"

the jungles and hills about *Cittúr*, calling it also by the same name of *Colsun* given to it by the people of *Bhíma Shancar*. The people to the southward have also marvellous tales of its prowess and address.

A gentleman at the head of the Deccan Survey vouches for the existence of the Wild Dog, similar to my specimen, in the Southern Mahratta States, as in the prosecution of his duties he once came upon a troop of them under a tree, grouped in various positions; they were too vigilant however to let him get a shot at them. Wild Dogs exist also in the neighbourhood of the hill-fort of *Asírgarh*, some officers of the 23d Regiment Bombay Native Infantry having seen a pack in full pursuit of a wild buffalo. They are met with on the *Nilagiris*, and a gentleman recently from those mountains, to whom I showed my specimen, identified it with the Wild Dog of those elevated regions.

Poona, August 1st, 1828.

W. H. SYKES,
Major.

Since writing the above, I am enabled to state that Captian OAKES, of the Bombay Army, had a *Colsun* in his possession alive for a considerable time, and was never able to subdue its natural savageness in the slightest degree.

Bombay, January 21st, 1831.

W. H. S.

As corroborative of the preceding description, and as shewing that the same animal is to be met with in other parts of India, the following observations by THOMAS H. BABER, Esq., and Colonel HENRY J. BOWLER, may be found interesting.

“The only account I have met with of the Wild Dog in India, is that given by Captain WILLIAMSON in his “*Oriental Field Sports*,” which to the best of my recollection corresponds with this of Colonel SYKES. It is also quite the same, in all its features and characters, as those which I have frequently observed in the western coast, and in the *Balaghát* district, where they are very numerous. As often as I have met with them, they have invariably been in packs of from thirty to perhaps sixty. They must be very formidable, as all animals are very much afraid of them. Frequently, remains of hogs and deer have been brought to me, which had been taken the over night by these Wild Dogs. The natives say they kill tigers and *chítas*, and there is no doubt of the fact. It is quite correct that they are found in the

Nilagiris, though only in the western parts. I myself was followed, while travelling between the *Paitira* river and *Naddibatt*, a distance of eight or nine miles, by a pack of them, and had I not repeatedly fired off my pistols they would certainly have carried away three or four terriers and Spanish dogs that were following me at the time. Two or three times I succeeded in getting young ones, but I did not keep them longer than three or four weeks, they were so very wild as well as shy. It was only at night that they would eat, and then most voraciously. In the formation of their claws there was a difference from that of the wolf or *shakal*, resembling more the feline than the canine species, and this will account for the circumstance of these dogs always attacking and tearing out the eyes of their prey."

(Signed) T. H. BABER.

The *Colsun* described by Colonel SYKES is also common in the Hyderábád territory, and in most parts of the Deccan, also along the whole extent of the woody country in the districts of Ellúr and Rájamahendrí, and in part of Ganjam, on the eastern or Coromandel coast.

In the interior of the Deccan, they have been frequently seen by sporting gentlemen, but nearer the eastern coast they are generally shy. The *Shicáris* call it, in Hindustání, *Jangalí Cutta*; and in Telugu, *Adavi Cucca*, both meaning the Wild Dog. They frequently hunt in packs, and are considered tolerably fleet. To one of these hunts I was once indebted for a haunch of venison, which proved, after the hard run the animal had had, most excellent eating. Early one morning, during a military tour in the Ganjam district, my attention was suddenly attracted by a loud hallooing and shouting amongst the followers, a short distance in the rear. Conceiving they were attacked by robbers, the strip of country on the left being rather wild, I galloped back, and rejoined them just in time to see the termination of one of these hunts. A fine buck antelope was observed bounding through an extensive, low, scattered jungle, and clumps of wild myrtle bushes, closely pursued by ten or twelve of these Wild Dogs. He was so hard pressed by them, that just as I came up, he dashed into a small tank near the road side, but it being shallow, with a muddy bottom, he plunged and could make no progress, and would, in that situation, soon have fallen an easy prey to the pack, had they not been alarmed and frightened away by the noise and shouting of the camp followers.



Enthographed for the Royal Asiatic Society by T. Farland

THE KOLSUN or WILD DOG.

Class: Mammalia Order: Carnivora Tribe: Digtigrada Genus: Canis.

A friend of mine, Major PEW, killed two of these dogs in the Rájamahendrí district, and from him I have obtained the following description of them, which I think nearly accords with that furnished to the Society by Colonel SYKES.

Colour—Reddish brown.

Hair—Rather longer than that of the common *Pariah* dog.

Tail—Bushy, more resembling that of a *shakal* than a dog.

Ears—More rounded than those of dogs usually are, and more resembling those of the feline race.

Feet—Particularly round.

These animals scarcely stood so high as a *shakal*, but were much stouter and heavier in all respects.

(Signed) H. J. BOWLER.

XXVI.—Colonel VANS KENNEDY on the *Védānta* System.

Read 16th February 1833.

THE Council of the Royal Asiatic Society, fully coinciding with the sentiments expressed by its Secretary at the General Meeting held on the 2d of March, has accordingly ordered that the substance of the remarks made by Mr. Haughton should, in justice to Mr. Colebrooke, be printed with Colonel Vans Kennedy's paper, as follows:—

Substance of Mr. (now Sir Graves C.) Haughton's Remarks.

“ It is well known to most of the Members that Mr. Colebrooke has been long in a state of health that incapacitates him from making a reply to Colonel Vans Kennedy's objections; I therefore think it would be unfair to allow this meeting to separate with an impression unfavourable to our esteemed Director, more particularly as I conceive he has been misunderstood by the able writer of the paper.

“ I am not aware that Mr. Colebrooke has asserted, or ever meant to imply, that the basis of the *Védānta* philosophy is material, although he certainly has said that the term *máyá*, or illusion, which is now so commonly employed by the followers of this school, is not favoured by a reference to the early commentators. It is, indeed, impossible to suppose that Mr. Colebrooke, the most profound expositor of the doctrines of the Hindú metaphysicians that Europe has yet produced, could have entertained such a singular opinion; an opinion that would be contrary to that of almost every boy in India. If I may be allowed to offer an opinion upon the subject, I would say, that there is not one of the six *dars'an'as* or schools, into which Hindú metaphysics are divided, that is *essentially* material. All these schools have the same primary ideas, employ the same terms, and use the same mode of argument; it is only in the application and in the results that they disagree; in short, their differences are rather those of sects than of distinct schools. The Colonel has said that the Hindús have no word that corresponds to our idea of *matter*. This opinion I conceive to be quite erroneous; for the word *matter* itself appears to be originally *Sanscrit*, and is employed in the first book of MENU* in the very sense of *matter*. Thus we find *an'vyó mátrá*, &c. ‘With minute transformable atoms of the five elements, called

* v. 27.

mátrás,* the whole of this (universe) comes into existence in due succession.' This word is derived from the root *má* 'to measure,' and implies the thing which measures space: as good a definition, perhaps, as human reason can give of matter. These abstract inquiries have always occupied the Hindús, but they have proceeded in a way different from ourselves: they have attempted to begin at the Source of all things, and to come down the stream accounting for all our perceptions; while the metaphysicians of Europe have endeavoured to rise 'from Nature, up to Nature's God,' and thus to reach the Fountain of life.

"It may be necessary to say a few words with regard to the statement of the Colonel, that Mr. Colebrooke has asserted that the *Védántins* identify the Creator with the creation, and that he thus incorrectly turns the *Védánta* system into one of pure materialism. The Hindús undoubtedly make Nature a dependent existence, and so far identify the Creator with it. Nature must be either a dependent or an absolute existence: if the latter, we shall then have a duality of which God and Nature are the heads; and this view cannot be intended to be imputed by Colonel Vans Kennedy to the Hindú metaphysicians of any of the schools. The Deity is therefore identified with Nature as its Source, and this is so far from conveying the idea of pantheism, that even in MENU, where the system of CAPILA is followed, the Deity is made the author of Nature, and is declared, even in his plastic character as BRAHMÁ, to be *sarvabhútamaya*† 'made up of all beings.' In the comment of CULLÚCA, on the first passage already quoted, it is expressly stated, that Nature is *mánasa-srishti* 'an intellectual creation.' Mr. Colebrooke, therefore, is in no way chargeable with inconsistency or incorrectness in saying that the *Védántins* identify the Creator with Nature, and consider him as the efficient and material cause of the universe, for this is done by them in common with the followers of the remaining *dars'an'as*. The opposite views, arising from these considerations, may be summed up in a few words: an intellectual system supposes GOD IS ALL; a material, and therefore pantheistic view, involves the idea that ALL IS GOD. The first has a spiritual, and the second a material basis."

If any support were considered necessary to the view of the subject taken in the foregoing remarks, it might be found in the subjoined extracts from the Translations of several principal Books, Passages, and Texts of the Védas and Védánta, published by the Rájá Rammohun Roy: they are taken from the London edition of 1832.

1. From the "Abridgment of the *Védánt*," p. 15.

"God is the efficient cause of the universe, as a potter is of earthen pots; and he is also the material cause of it, the same as the earth is the material cause of the different earthen pots; or as a rope, at an inadvertent view taken for a snake, is the material cause of the conceived existence of the snake, which appears to be true by the sup-

* *Mátrá* is a feminine noun in Sanscrit, as *materia* is in Latin; and both mean the substance of which things are made.

† MENU I., v. vii.

port of the real existence of the rope. So says the *Védānt* : * ‘ God is the efficient cause of the universe, as well as the material cause thereof (as a spider of its web), as the Ved has positively declared, that from a knowledge of God alone, a knowledge of every existing thing proceeds.’ ”

2. From the “ *Mundak Upanishad* of the *Atharva-Véda*,” p. 28.

“ That Supreme Being, *who is the subject of the superior learning*, is beyond the apprehension of the senses, and out of the reach of the corporeal organs of action, and is without origin, colour, or magnitude, and has neither eye nor ear, nor has he hand or foot. He is everlasting, all-pervading, omnipresent, absolutely incorporeal, unchangeable, and it is he whom wise men consider as the origin of the universe ; in the same way as the cobweb is created and absorbed by the spider independently of exterior origin, as vegetables proceed from the earth, and hair and nails from animate creatures, so the universe is produced by the eternal Supreme Being.”

COLONEL VANS KENNEDY'S REMARKS ON THE VEDANTA SYSTEM.†

As two most opposite accounts of the *Védānta* system have been published, I am induced to think that a farther discussion of this subject will not be devoid of all interest. The question, indeed, seems to be one that well deserves consideration, since the answer to it, if resting on sufficient grounds, is to determine whether the *Védānticas* adopt the system of *material* pantheism that prevailed among the Grecian philosophers, or whether they have invented a most refined system of *spiritual* pantheism altogether unknown to the philosophers of Europe. Under this impression I have the honour of submitting the following remarks to the Royal Asiatic Society, in the hope that they may at least tend to assist in forming a correct opinion with respect to the real nature of the *Védānta*.

Thirty-eight years ago Sir WILLIAM JONES thus described this system : “ The fundamental tenet of the *Védānti* school, to which in a more modern age the incomparable SANCARA was a firm and illustrious adherent, consisted, not in denying the existence of matter, that is, of solidity, impenetrability, and extended figure (to deny which would be lunacy), but in correcting the popular notion of it, and in contending that it has no essence independent of

* xxiii., 8th, 1st.

† The Council of the R. A. S. is not answerable for the correctness of the Sanscrit quotations, as it is not in possession of the original works from which they are extracted. The quotations are printed verbatim from Colonel VANS KENNEDY'S MS.

mental perception ; that existence and perceptibility are convertible terms ; that external appearances and sensations are illusory, and would vanish into nothing, if the divine energy, which alone sustains them, were suspended for a moment.”* But M. F. VON SCHLEGEL has remarked, “ In the *Bhāgavad-gītā*, and probably in all the works ascribed to VYĀSA, the *Védānta* system predominates, of which he was the inventor ; hence, amongst the schools of Indian philosophy, we are best acquainted with this system. From the translation of that work every one may easily convince himself that the *Védānta* is nothing but pure and complete pantheism, and there are many passages in the original which exhibit this in a stronger manner than it appears in the translation.”† Mr. WARD, also, has represented the *Védānta* to be a system of materialism, and the learned Director of the Society thus concludes his Essay on this school of Hindú philosophy :—“ The notion, that the versatile world is an illusion (*māyā*), that all which passes to the apprehension of the waking individual is but a phantasy presented to his imagination, and every seeming thing is unreal and all is visionary, does not appear to be the doctrine of the text of the *Védānta*. I have remarked nothing which countenances it in the *Sūtras* of VYĀSA, nor in the gloss of SANCARA, but much concerning it in the minor commentaries and elementary treatises.”

The question, therefore, is to ascertain whether these remarks of Sir WILLIAM JONES be correct or not. The *Védānta* theologists asserted, in a very remote age, “ that all spirit is homogeneous, that the spirit of God is in kind the same with that of man, though differing from it infinitely in degree, and that, as material substance is mere illusion, there exists in this universe only one generic spiritual substance, the sole primary cause, efficient, substantial, and formal of all secondary causes and appearances whatever.‡ But I must at once confess that I am surprised how two opinions could ever have been entertained on this subject. For the work on the *Védānta* system which is universally admitted to be of the highest authority, is the Commentary of SANCARA ĀCHĀRYA on the *Sūtras* of

* Sir WILLIAM JONES's Works, vol. I. p. 165.

† Ueber die Sprache und Weisheit der Indier, pp. 147, 148.

‡ Sir WILLIAM JONES's Works, vol. I. p. 173.—It will be observed, that these remarks are somewhat inconsistent with those contained in the preceding quotation ; in which Sir WILLIAM JONES more correctly represented the energy of the Supreme Being as the efficient cause of all secondary causes and appearances.

VYĀSA; and throughout the whole of that voluminous work SANCARA shows himself a determined maintainer of *spiritual*, but not of *material* pantheism. To evince this it is merely necessary to quote the following passages:—"Thus the Supreme Soul is not affected by the *māyā* of transitory existence."* Another passage is as follows:—"In both the *S'ruti* and the *Smṛiti*, it is said that the *māyā*, the *śacti*, the *pracriti* of the omniscient Lord is the seed from which transitory existence and delusion have originated."† I will merely add two more without the texts; the first is as follows:—"Persons skilled in the *Vēdas* say, that though it is said in the *Vēdas* that BRAHM is the immediate cause of the existence of this universe, still it is to be understood that it was produced by *māyā*, without exertion on the part of BRAHM."‡ The other, "Those who practise meditation and devout abstraction, behold, through the irradiation of their own souls, the mysterious nature with its qualities of the energy (*śacti*) of the Supreme Soul; which energy is also called *avidyā*, *māyā*, and by other names. It manifested itself in a mysterious manner of three colours, white, red, and black, representing the qualities of purity, impurity, and darkness; and it is, through the infused power of BRAHM, the origin of all causes and effects connected with time. For though there is but one sole substance devoid of difference, and but one form, still are multitudinous forms displayed by *māyā*."§

But even in the *Sūtras* of VYĀSA the very term *māyā* occurs at least once, as in this *Sūtra*, which seems to mean "all is *māyā*, as the form of the Supreme Being is not manifest."|| SANCARA's commentary, however, on

* एवंपरमात्मापिसंसारमाययानसंस्पृश्यत Comment upon the 9th *Sūtra* of the 1st pad of the 2d chapter.

† संसारप्रपंचबीजभूतेसर्वज्ञस्येश्वरस्यमायाशक्तिः प्रकृतिरिति श्रुतिस्मृत्योरभिलष्येते Comment on the 15th *Sūtra* of the same pad and chapter.

‡ I need scarcely remark, that to translate quotations from a prolix commentary *literally* is quite out of the question; and I have therefore only endeavoured to give the substance and true meaning of the passage quoted.

§ SANCARA, however, in general uses other terms than *māyā*, but all imply the same meaning and convey the same doctrine, namely, that this universe is a mere illusion, and that man, even in this life, may become so enlightened by the acquisition of divine knowledge, as to perceive that there is nothing real except the Supreme Soul, and that *he* is that soul.

|| मायामात्रं कास्त्र्येनानभियक्तस्वरूपत्वात् 3d *Sūtra*, 2d pad, 3d chapter.—Mr.

this text is singularly unsatisfactory; but its meaning is rendered unquestionable by this parallel passage in the *Chanducya Upanishad*,—"If delusion be known it will undoubtedly cease; this duality is merely *máyá*, and there is nothing that is real except actuality." But, as I do not possess SANCARA's Commentary upon this *Upanishad*, I cannot state the manner in which he may have explained this passage. But the same doctrine is as clearly inculcated in the *S'wétáswatara Upanishad*, as for instance: "From meditation upon the Supreme Soul, from union with it, and from a knowledge of its real essence, is effected the cessation of that *máyá* which causes a belief in the existence of a multiform universe."* Upon which SANCARA has commented to this effect: "Let it be known that *all* (τὸ πᾶν) is the Supreme Soul, and soulless *máyá* ceases. Let the intimate conviction be acquired that *I am* BRAHM, and the knowledge of the divine nature of the soul be obtained, and *máyá* will cease. Then also will cease the belief in the existence of this universe, as the cause of such belief is *máyá*." The following passage also, in the same *Upanishad*, is either quoted or referred to more than once in SANCARA's commentary on the *Sútras*: "By this means the universe is produced by *máyá*, and the soul encompassed by *máyá* [appears to be] other [than the Supreme Soul]. Be it therefore known, that *máyá* is the same as *pracriti*,† and that even *mahéśwara* partakes of *máyá*."‡

If, at the same time, the four great sentences (महावाक्याणि), one of which is ascribed to each of the *Védas*, be actually contained in those works, it must necessarily follow that the *Védānta* system is founded upon

COLEBROOKE has justly observed, that these *Sútras* are in the highest degree obscure, and could never have been intelligible without an ample interpretation. But, unfortunately, the commentary of SANCARA on the *Sútras*, and his commentaries on most of the *Upanishads*, are frequently as obscure as the text itself.

* प्रपंचोयदिविद्येतनिवर्तेतनसंशयः ॥ मायामात्रमिदं द्वैतमद्वैतं परमार्थतः 8th sloca, 3d section.

तस्याभिध्यानातयोजनात्त्वभावादभूत्चेतिविश्वमायानिवृत्तिः 1st chapter.
It has not been attempted to translate this sloca literally.

† SANCARA explains this to mean that *máyá* or *pracriti* is the immediate cause of the existence of all things.

‡ अस्मान्मायीसृजतेविश्वमेतत्तस्मिन्श्चान्योमाययासन्निरूधः मायांतुप्रकृतिंविद्यान्मायिनंतुमहेश्वरं 4th chapter.

the *Védas*, and that consequently no change can have taken place in its original doctrine; for these sentences are continually occurring in SANCARA's commentary on the *Sútras* of VYÁSA, and in all *Védānta* works; and they alone are fully sufficient to prove that it is a *spiritual*, and not a *material* pantheism, which is adopted by the *Védānticas*. Of these sentences the one said to be contained in the *Rig Véda* is, "This (the object contemplated, whether animate or inanimate) is BRAHM;"* in the *Yajur Véda*, "I am BRAHM;"† in the same *Véda*, "Thou art it" (*i. e.* the Supreme Soul);‡ and in the *Aṣṭharva Véda*, "This soul is BRAHM."§ There is also another celebrated text of the *Védas* which is continually quoted or referred to by *Védānta* writers, and which SANCARA, in his commentaries on the *Sútras*, thus cites: "Entity existed from the beginning, for there was one entity (the Supreme Soul) but not a second." "Then it wished, 'let me become many, that beings may be produced.'"|| In another place, however, of his commentary, he adds these words to the first part of this quotation: "So this one [entity or real substance] was from the beginning soul only;" and remarks, that this soul was BRAHM, immortal, and self-existent. But SANCARA equally quotes the text with which the *Aitaréya Aranya Upanishad*, translated by Mr. COLEBROOKE in his Essay on the *Védas*, commences, "Originally this [universe] was indeed soul only,

* ब्रह्मेति

† अहंब्रह्मास्मि

‡ तत्त्वंअसि This sentence is given at greater length in the 8th section, 8th praputaca of the *Chandogya Upanishad*, in which UDDALACA thus addresses his son SWÉTACETA: सर्वतत्सत्य सआत्मातत्त्वंअसिश्चेतकेतो all it which is the soul is real, and thou art it, O SWÉTACETA.

§ अयंआत्मा ब्रह्मेति

|| सदेवसौम्येदमयआसीत् एकमेवाद्वितीयं—तदैक्षतबहुस्यांप्रजार्थेयेति Comment on 5th *sútra*, 1st pad, 1st chapter. The words quoted in another place are:

आत्मावाइदमेकएवायआसीत् Comment on 3d *sútra*, 1st pad, 1st chapter.

The similar text in the *Aitareya Upanishad* is: आत्मावाइदमेकएवायआसीन्ना-न्यत्किंचनमिषत्सईक्षतलोकान्नुसृजा

nothing else whatever existed, active [or inactive]. He thought, 'I will create worlds.'"

Why, however, Mr. COLEBROOKE has introduced the word "universe" in his translation * of this text I am not aware; for frequently as I have met with it, either quoted or referred to, the context has invariably led me to conclude that the reason of its being so often cited, proceeded from its so clearly denying the existence of duality, and consequently the reality of the illusive appearances of which alone this universe consists. Because all the schools of Hindú philosophy maintain most firmly the ancient opinion, that *ex nihilo nil fit*. Spirit, therefore, could not possibly become matter; whence it evidently follows, that if nothing but spirit originally existed, and a creation *ex nihilo* be impossible, all that appears to be matter must necessarily be a mere illusion. It is obviously on this account that, in quoting or referring to these texts, the *Védānta* writers most generally use the one that concludes with "let me become many" (बहुस्यां), instead of the other, "I will create worlds" (लोकान्नुसृजा). For what the *Védānticas* understand by the former expression, is thus explained by Mr. COLEBROOKE in his Essay on the *Védānta* System: "That BRAHM is entire, without parts, is no objection: he is not wholly transformed into worldly appearances. Various changes are presented to the dreaming soul. Divers illusory shapes and disguises are assumed by the same spirit." But the *Védānticas* at the same time maintain, as the preceding quotations will have fully shewn, that, though in a certain sense the production of worldly appearances may be ascribed to the Supreme Being, as they proceed from his *fiat*, still he must not be considered as being the immediate cause of them.

The thus separating his energy from the Supreme Being, and giving to it an independent power, is certainly one of the most incomprehensible conceptions that ever occurred to a philosopher. But it is founded on this text of the *S'wétás'watara Upanishad*, which is frequently quoted by both *Védānta* and *Sanc'hya* writers: "One unborn, red, white, and black, creating many beings of the same forms: through delighting in whom, one man is

* This translation seems at the same time to be somewhat inconsistent, for it would imply that the universe existed before worlds were created. It appears to me, therefore, that the proper word to be understood and joined to the pronoun would be सत् as in the preceding quotation, and that the text should be thus translated: "This one entity (or real substance) was from the first soul only, and nothing else whatever existed."

sunk in the slumber [of ignorance], and by forsaking whose allurements another becomes immortal.”* This text is quoted by SANCARA in his commentary on this unintelligible *Sūtra* of VYĀSA : “From difference in kind like a sacrificial spoon,”† and thus explained : “In this text, the red, white, and black, represent the qualities of impurity, purity, and darkness. The red, or impurity, being the cause of the passions and affections of men ; the white, or purity, the cause of the mind being enlightened by divine knowledge ; and the black, or darkness, the cause of the mind being obscured by ignorance. By the *one*, also, thus described, is to be understood *pracriti*, who creates many beings endowed with those qualities. Whoever, therefore, delights in that *pracriti*, his soul becomes encompassed with ignorance, and being unable to distinguish the real nature of his soul, he experiences pleasure and pain. But whoever acquires that discriminating knowledge, he forsakes the enjoyments that depend upon *pracriti*, and obtains eternal bliss.” It is particularly to be observed, that in his commentary on the *S’wétās’watara Upanishad*, SANCARA uses the word *MĀYĀ* instead of *pracriti*.‡

From the preceding quotations it will perhaps sufficiently appear that the *Védānticas* have, from the first origin of their school, denied the existence of matter, and maintained that nothing has real existence except one all-pervading and undivided spiritual substance. I am therefore at a loss to understand the grounds on which Mr. COLEBROOKE, in his essay on this system, has thus stated : “The succeeding section affirms the important tenet of the *Védānta*, that the Supreme Being is the material§ as well as the efficient cause of the universe ; it is a proposition directly resulting from the tenor of the passages of the *Védas*, and illustrations and examples adduced.” For the copy of the *Sūtras* now before me is divided in a different manner from the one referred to by Mr. COLEBROOKE, and I

* अजामेकान्लोहितशुक्लकृष्णाबहीः प्रजाः सृजमानांस्वरूपाः ॥ अजो-
खेकोजुषमाणोनुशेतेजहात्येनांभुक्तभोगामजोन्यः 4th Chapter.

† 9th sūtra, 4th pad, 1st chapter.

‡ For instance, in the concluding sentence of his commentary on the *Sūtras*, the expression is एनांप्रकृतिंभुक्तभोगां but in that on the *Upanishad* it is एनांमायांजावरणविक्षे-
परूपांभुक्तभोगां

§ See quotation from the Vedant, page 413.

have not been able to find in them a single *Sūtra* which, in my opinion, would bear such a meaning. In fact, the Sanscrit language does not contain any term equivalent to the word matter; and even the four principal schools of Hindú philosophy concur in rejecting the notion of matter which has invariably prevailed in Europe. For the *Védānticas* declare, that what appears to be such is a mere illusion; the *Sanc'hya*s consider the universe to be the development of a plastic nature, in the same manner as the tree is developed from the seed, to which they also ascribe the power of again withdrawing such development into itself, in the way that a tortoise puts forth and retracts its members; and the followers of GÓTAMA and CANÁDE hold that substance is an aggregation of atoms, which are constantly liable to separation, and even to returning to their original unaggregated and imperceptible state. But it will be evident, that none of these definitions apply to the different opinions which have been entertained respecting matter, by the philosophers of Europe, and consequently this term ought to be carefully avoided, whenever it is wished to convey a correct description of Hindú philosophy.

No doubt, however, but that the illustrations and examples adduced in explanation of the *Védānta*, might seem to warrant the conclusion that it is a mere system of materialism, for never were more inapplicable examples adduced to illustrate any subject; as for instance, the favourite one, in describing the repeated destruction and reproduction of the universe, of the spider spinning its web from its own substance and then retracting it: since, were this example to be understood literally, it would follow, contrary to the texts of the *Védas* above quoted, that it was matter and not spirit which had eternally existed. The other comparisons, also, which are generally employed—the rays from the sun, the sparks from fire, the stream from its source, air confined within a closed vessel, are all equally incompatible with the real doctrine of the *Védānta*. But this figurative language never for a moment misleads, even the least informed follower of this school, for after making use of such illustrations, which so clearly admit the existence of duality, he will immediately maintain that what appears to be matter is mere illusion, and that nothing really exists except spirit. The *Védānta* writers, at the same time, in general qualify such arguments as imply an admission that matter is a reality, by employing such terms as, “to speak popularly, or according to common use,” or some such like expression. In reading *Védānta* works, therefore, the utmost attention should be paid to

this circumstance ; since, were it not adverted to, the greatest part of SANCARA's commentary on the *Sútras* of VYÁSA would be self-contradictory, as, in refuting the opinions of opposite sects, he of course makes use of words according to their usual acceptation. Nor, in attempting to explain the ideal system which the *Védánticas* profess, would it be possible to avoid all expressions and illustrations of a material nature ; for they do not deny that, to all intents and purposes, man, while the soul is imprisoned in the body, unless he becomes enlightened by divine knowledge, is impressed with the firm belief that matter really exists, and that he must, in consequence, act according to this belief.

It is this marked difference between its practical and speculative tenets, that so remarkably distinguishes the *Védánta* from all other systems of philosophy. But this distinction rests solely and entirely on the doctrine of *Máyá*—on the belief that the human soul, though the same originally as the Supreme Soul, is by some mysterious means excluded from participation in the divine nature, and exposed to many illusive appearances and sensations which are productive of joy and sorrow, pleasure and pain, both in this and in a future life. It is at the same time maintained, as it appears from the four great sentences above quoted, that this exclusion does not actually exist, and that such a supposition is a mere illusive conception proceeding from ignorance, the erroneousness of which is immediately perceived if the human mind becomes enlightened by divine knowledge. Until then, however, man must act precisely in the same manner as if all the illusive appearances with which he was surrounded had a real existence ; and it is even considered deserving of blame if an individual adopts a contemplative life, before he has for a considerable time performed all the duties incidental to his station in society. But the apparent man is, in reality, an undivided part of the Supreme Soul itself, and it is mental darkness alone which conceals this truth from him, and leads him to suppose that he, and other similar appearances, possess material forms, and that this universe not only actually exists, but that it is composed of material substances.

It will be hence evident, that the *Védánta* does not in any respect correspond with any system of European philosophy, for it neither derives substances, admitted to be material, from the divine nature of the Supreme Being, nor does it identify him with the universe, and it equally rejects an eternal matter co-existent with him, and a matter created *ex nihilo*. In it, also, the denegation of the real existence of sensible objects is simple and

decided, and rests not on the arguments resorted to for that purpose by the academics and sceptics. Some resemblance, however, might on a cursory view seem to exist between the *Védānta* and *Eleatic* schools; for BRUCKER appears to have correctly stated that the following were the metaphysical opinions of PARMENIDES :—

- I. *Ex nihilo nil fit.*
- II. The cause of all things is *one*, immoveable and immutable.
- III. That *one*, therefore, is the *all*.
- IV. That the *one* is unproduced, eternal, and of a spherical form.
- V. That this one *ens* is alone real, and all other things are nonentities, and consequently non-existent.
- VI. Nothing, therefore, is generated or destroyed, but such changes are merely appearances which deceive us.

Hence, several writers have maintained that the *one* and *all* of the *Eleatic* sect, was intended to apply to one sole and incorporeal deity; and M. COUSIN, in his life of XENOPHANES, has remarked: "Let us, therefore, not ascribe to XENOPHANES the work of PARMENIDES; but at the same time let us admit that the germ of the opinions of PARMENIDES is contained in those of XENOPHANES, not in the Ionian, but in the Pythagorean part of the latter's philosophy. And this is so true, that the unity, which in his successor's system might have been either material or spiritual, according to the prevalence of the Ionian or Pythagorean element, was spiritual, and exclusively spiritual, in the system of PARMENIDES; that, liable to become in his hands either that of the world or that of God, it has become a divine unity, an unity solitary and retired into itself, before which the world, that is to say the universe, is so little the unity and the God of PARMENIDES, that, according to PARMENIDES, in proceeding from unity one cannot acquire the conception of the world and the universe. Far, therefore, from being a Pantheist, PARMENIDES distinguished the *all* from unity, the *το πᾶν* from the *το εἷς*, that he denies the *all*, and plunges into the abyss of an absolute unity, which alone exists, an unity without number, existence without substance or reality, which is nothing more than a sublime abstraction that resembles the annihilation of existence."*

But M. COUSIN himself makes these admissions: "Let one now judge of the folly of those who, repeating without any historical or philosophical

* *Nouveaux Fragmens Philosophiques*, p. 86.

criticism assertions founded on texts undeserving of credit, of bad writers of the Greek empire, have charged XENOPHANES, and also his school, with the imputation of pantheism, at present so thoroughly established and accredited in respect to the philosophic crowd, that in attacking such a ridiculous prejudice, and in here substituting the authority of ARISTOTLE for that of THEODORET, the pseudo PLUTARCH and the pseudo ORIGEN, it is we who will be considered as rash, and the mere advancers of a paradox.”* This will no doubt appear a strange manner of treating the inestimable works of a BRUCKER, a TIEDMANN, and a TENNEMANN; but as so arrogant a mode of condemning the labours of preceding authors is not likely to detract from their authority, I shall transcribe the following remarks of TIEDMANN :

“ However firmly the *Eleatic* philosopher may have hitherto sustained his flight into the intellectual regions, and however well he may have maintained himself there, still he could neither separate himself sufficiently from sensible objects nor abstract extension from substance. In consequence, he suddenly falls into absurdities, which greater metaphysicians, who lived after him, have not failed to mention. PLATO, from the same passages (as those before quoted), draws the conclusion, that the *one* has also extension, has parts, and consequently that it is not in the strictest sense *one*, and therefore that PARMENIDES is not free from self-contradiction. ARISTOTLE makes the same objection with perfect justice.”

“ The *one* or *all*, equally thinking and extended, is God; for the same verses of PARMENIDES, which PLATO refers to the *all*, are explained by ARISTOTLE as applicable to God; and amongst all the ancients, without exception, it was assumed as fully admitted, that the terms God, the *one*, and the *all*, bore one and the same signification.”

“ So, consequently, PARMENIDES is, like his teacher XENOPHANES, a pantheist, but a better pantheist, in so far that he elevated the gross materialism of all his predecessors, by denying that separate and separable parts and mutability were ascribable to the *all* and to the divine nature, and thus he drew nearer to the simple and spiritual: in so far, also, that, in respect to immutability, he thought more sublimely of the divine nature, and that he was the first amongst philosophers who ascribed that attribute to the deity, without which he cannot be considered as God, nor duly distinguished from all other things.

* Nouveaux Fragmens Philosophiques, p. 87.

PARMENIDES was likewise a better pantheist than SPINOZA, or the maintainers of the system of emanation, since these declare that the divine nature is susceptible of mutable and varying modifications, so that it can appear a man, an animal, or a stone, and assume all the forms of finite beings, or rather can change itself into a man, an animal, or a stone.”*

MOSHEIM, also, in his remarks upon the twenty-first section of the fourth chapter of “CUDWORTH’S Intellectual System,” has observed, “I would, however, wish that no one should persuade himself that PARMENIDES was so insane and devoid of reason, as to suppose that all sensible objects were mere dreams and fallacies of the senses, and that he was of opinion that there was no motion, nothing produced or destroyed, but that it only seemed to us that such changes took place. If any man so thought, he must have also thought that he was not a man, but the shadow of a man. I am not ignorant that most of the ancients, ARISTOTLE, SEXTUS, and others, have thus explained the opinion of PARMENIDES. COLOTES also, in PLUTARCH, accuses PARMENIDES of having taken away fire and water, the precipice and the cities, that is, that he had reduced all things in nature to the delirious and spectral phantasies of the sick.” “PARMENIDES not only discoursed with respect to such things, but also with regard to their causes and origins, thus reducing them to their first elements. This however he never would have done, had he been of opinion that we were merely dreaming and deceived by our senses, and that nothing of what we thought we saw had real existence. For what man in his senses would investigate the causes and reasons of a thing which he believed to have never existed.”†

To this objection TIEDMANN thus replies, and his remarks are so applicable to the *Védānticas* that I am induced to quote them: “What the great man here imputes as a fault to the philosopher of Elea, has the misfortune that it is also imputable to all idealists; and the ascribing insanity to them all, without exception, may readily be deemed an inconsiderate degree of harshness. Let it be once admitted that all which lies within the circuit of our experience is mere appearance, and then it is both natural to, and compatible with reason, to search after the grounds and principles of this appearance, in order to know why this appearance displays itself to us

* TIEDMANN’S “Geist der Spekulativen Philosophie,” vol. I. p. 178.

† MOSHEIM’S Latin translation of “CUDWORTH’S Intellectual System,” vol. I. p. 600, note, second column.

at all times in such an order, according to such laws, and with such properties; nor is it an evident want of sense to philosophize respecting such appearance. PARMENIDES might answer, "men, animals, bodies, as well as their production, destruction, and changes, are in truth nothing but mere appearances; but still you may comprehend why these appearances change themselves in so fixed and regular a manner. Represent to yourself that the first origin of them was fire and water, and that these two elements, through their various conjunctions, exhibit to you all that you take for reality; you will gain so much at least that you will not imagine that you are living in an Utopian world, and thus you will be able to regulate your actions prudently, and to the best advantage, according to the laws of such appearance."*

But no account of the *Eleatic* system admits of its being concluded, that PARMENIDES had ever the slightest conception of the *Védānta* doctrine of *Máyá*; nor does it appear probable, either from the philosophical opinions that prevailed at the period when he lived, or from any impartial view given of his system, that he ever succeeded in drawing a marked distinction between matter and spirit. For if the latter had been the case, it is impossible that so many acute metaphysicians should have experienced any difficulty in at once determining whether PARMENIDES was a Pantheist or not. Supposing, however, that M. COUSIN is correct in stating that PARMENIDES distinguished the *το πᾶν* from the *το ἐν*, and denied the existence of the former, his system would still remain dissimilar from the *Védānta*, inasmuch as PARMENIDES denied absolutely the existence of sensible objects. The *Védāntica*, on the contrary, gives to them, as far as the enlightened man is concerned, a positive existence; as man's perception of their being merely illusory appearances, depends entirely upon his acquisition of divine knowledge. At the same time, also, that he contends that the system of PARMENIDES was pure idealism, M. COUSIN shows how impossible it is for an European philosopher to form any conception of such a system as the *Védānta*. For he has observed: "On the other hand, unity without plurality is not more real than plurality without unity. An absolute unity, which does not display itself, or merely appears as a shadow, may well overwhelm by its grandeur, and enchant by its mysterious charm; but it does not enlighten the mind, and it is forcibly contradicted by such of our

* TIEDMANN'S "Geist der Spekulativen Philosophie," vol. I. p. 192.

faculties as are connected with the world, and which assure us of its reality ; and by all our faculties, active and moral, which would be a mockery and an accusation against their author, if the theatre on which they are obliged to act was nothing but a snare and illusion. A God without a world, is as false as a world without a God ; a cause without effects to manifest it, or an indefinite series of effects without a primary cause ; a substance that does not develop itself, or an ample development of phenomena without a substance to support them ; reality, solely derived from the visible or invisible : on each side equal error and equal danger, equal forgetfulness of human nature, and equal forgetfulness of the essential qualities of thinking and of things.”* But what M. COUSIN thus objects to, is precisely the *Védānta* system, in which it is maintained that absolute unity exists without plurality, and that though there is a primary cause, still the multitudinous and varied phenomena displayed in this universe, have no substance to support them ; or, to use the words of Sir WILLIAM JONES, “ That all bodies and their qualities exist, indeed, to every wise and useful purpose, but exist only as far as they are perceived.”

It is true, however, that the *Eclectic* sect maintained that there was only one real *ens*, and that was God ; but in adopting the doctrine of emanation, they were obliged to admit that matter as well as spirit had emanated from the deity. “ For if (observes BRUCKER) we follow PLOTINUS, who had heard AMMONIUS, he expressly affirms that *ex nihilo nil fit*, and it hence necessarily follows that all flowed from the *one*, since the *one* existed before the *duad*. In consequence of this emanation, not only the divine intellect and the soul of the intellectual world, and all the spiritual entities that are contained in it, but also matter from which it was necessary to frame all things, and to give a form to the seminal causes that lay concealed in the *anima mundi*, had flowed from the fount of all things. As, however, all things were said to be made by a necessary sequence of eternal nature, PLOTINUS could not but affirm that the emanation of this matter was from the supreme fount of all things. But this was contrary to the disorderly, brute, and evil quality which PLATO ascribed to matter. It was therefore necessary that this should be given up, and resort had to metaphysical ideas and distinctions, in order that the *Eclectic* philosophers should not appear to admit

* Nouveaux Fragmens Philosophiques, p. 72.

any thing unworthy of God.”* TIEDMANN expresses the same opinion in these words : “PLOTINUS teaches gross Spinozism, when he affirms that all things are parts of the divine nature, and allows that this is the first matter, which through innumerable changes is exhibited to us in countless forms. He teaches refined Spinozism, when he considers God as the logical subject of the multitudinous phenomena that come within our experience, and when he endeavours to derive all our notions of sensible objects, from ideas belonging to the understanding.”†

From the preceding remarks it will also appear, that although Sir WILLIAM JONES has, in his “Essay on the Philosophy of the Asiatics,” given a pretty accurate account of the *Védánta*, his observations respecting it, contained in his “Essay on the Mystical Poetry of the Hindús and Persians,” are totally inapplicable to this system. The beauty of the passage, to which I particularly object, will perhaps excuse the length of the following quotation : “If these two passages were translated into Sanscrit and Persian, I am confident that the *Védántis* and *Súfis* would consider them as an epitome of their common system ; for they concur in believing that the souls of men differ infinitely in degree, but not at all in kind, from the divine spirit, of which they are particles, and in which they will ultimately be absorbed ; that the spirit of God pervades the universe, always immediately present to his work, and consequently always in substance ; that he alone is perfect benevolence, perfect truth, perfect beauty ; that the love of him alone is real and genuine love, while that of all other objects is absurd and illusory ; that the beauties of nature are faint resemblances, like images in a mirror, of the divine charms ; that, from eternity without beginning, to eternity without end, the supreme benevolence is occupied in bestowing happiness, or the means of attaining it ; that men can only attain it by performing their part of the primal covenant between them and the Creator ; that nothing has a pure absolute existence but mind or spirit ; that material substances, as the ignorant call them, are no more than gay pictures presented continually to our minds by the sempiternal artist ; that we must beware of attachment to such phantoms, and attach ourselves exclusively to God, who truly exists in us as we exist solely in him ; that we retain,

* *Historia Critica Philosophia*, tom II. p. 428.

† TIEDMANN'S *Geist der Spekulativen Philosophie*, vol. III. p. 429.

even in this forlorn state of separation from our beloved, the idea of heavenly beauty, and the remembrance of our primeval vows ; that sweet music, gentle breezes, fragrant flowers, perpetually renew the primary idea, refresh our fading memory, and melt us with tender affections ; that we must cherish those affections, and by abstracting our souls from vanity, that is from all but God, approximate to his essence, in our final union with which will consist our supreme beatitude. From these principles flow a thousand metaphors and other poetical figures, which abound in the sacred poems of the Persians and Hindús, who seem to mean the same thing in substance, and differ only in expression, as their languages differ in idiom !”*

This exquisite description applies no doubt to the writings of the *Súfis* and of all other mystics ; but there is not a trace of mysticism in the sacred books of the Hindús, nor, as far as I am aware, in any Sanscrit work. It is even singular that such expressions as “the love and fear of God” never occur in those sacred books, nor in any *Védánta* treatise, although the terms themselves are frequently used, but love is then referred to terrestrial objects, and fear denotes the apprehension of being exposed to future states of apparent individual existence, previous to obtaining identification with the Supreme Being. The *Védánta* system, consequently, is taught, not in figurative and allegorical language, but in the most plain and direct manner, as the following quotations will at once evince. SUTA addressing the sages, “God being like one asleep, all has been made by *Máyá*, and being so made it is of the same nature as *Máyá*, for the effect is inseparable from the cause, and all has been produced by the agency of *Máyá*. But nothing subsists except BRAHM, supreme, one, and adualistic ; and it is through *Máyá* that BRAHM is thus manifested. In the world, in the vital soul, and in other forms, is displayed the all-pervading power of God, but never is his real essence otherwise manifested. Whoever, therefore, considers the world to have a distinct existence, is bound and not liberated ; but he who considers that all this is PARABRAHM, is no doubt released from the dreadful state of transitory existence.”† S’IVA addressing VISHN’U : “I will now explain to you, in a few words, the means of obtaining final beatitude ;

* Sir WILLIAM JONES’s Works, vol. I. p. 450.

† Scanda Púran Suta Sanhita yadgna Weibhawa khand, the 4th chapter of the Suta Upanishad.

listen, therefore, with faith and devotion. Final beatitude is obtained by a knowledge of the real nature of the soul, and not by works, and that knowledge is acquired from understanding the important meaning of the *Védānta* doctrines. The soul having thus become enlightened, it will be manifest to it that it is BRAHM. From having acquired this knowledge, man's belief in the individuality of his own soul will cease, and on such belief, ceasing the belief in duality will be also destroyed. This being destroyed, nothing will longer appear lovely or unlovely, and thus affection and hate will be also annihilated. Then, from their cessation will end the distinction of virtue and vice, and hence will finally be destroyed the senses and sensible objects. Thus, solely by a knowledge of the soul's real nature, is the belief in its individuality destroyed, and by this means, ignorance, the radical cause of the apparent existence of this universe, is likewise destroyed. From this knowledge, also, proceeds that of the real nature of BRAHM, in the same manner as certainty convinces us that the cord is not a serpent, or the post a man (as it was at first supposed); and as soon as this knowledge is acquired, it is perceived that ignorance was the origin of the belief that there are causes and effects, a maker and things made, and it is ascertained that nothing really exists except BRAHM.*

It will no doubt be evident that, in whatever freedom of thinking Christian philosophers may have indulged, the religion in which they had been instructed in their childhood, and which continued to prevail around them, would necessarily prevent such a system as the *Védāntica* from occurring to their conception. In consequence, DES CARTES thus expressly contradicts its fundamental principle: "If God should by himself exhibit to our minds an idea of extended matter, or if he should only cause it to be exhibited from something in which there was no extension, nor figure, nor motion, no reason could be conceived why he should not be considered as a deceiver. But we clearly understand that this substance is perfectly different from God and from our own minds; and we seem to perceive clearly that the idea of it comes to us from external objects, with which the idea in every respect corresponds: But it is evidently contrary to the nature of God that he should be a deceiver, as it has been before remarked; consequently, it must be concluded that a certain substance, possessing length, breadth,

* Scanda Púran Suta Sanhita yadgna Weibhawa khand, the 37th chapter of the Suta Upanishad.

and depth, and all those properties which we clearly perceive to belong to an extended substance, does really exist. It is this substance which we call matter or body.”*

But MALLEBRANCHE and BERKELEY, in denying the real existence of sensible objects, have approached, in some degree, to the *Védánta* system. A difference of opinion, however, prevails with respect to the nature of the union which the former supposed to exist between the human soul and God; and in making God the efficient cause of all secondary causes and effects, MALLEBRANCHE differs entirely from the *Védántica*. But in BERKELEY’S “Treatise on the Principles of Human Knowledge” occur several passages which correspond very nearly with the speculative doctrine of the *Védánta*. For instance: “It is indeed an opinion strangely prevailing amongst men, that houses, mountains, rivers, and, in a word, all sensible objects, have an existence, natural or real, distinct from their being perceived by the understanding. But with how great an assurance and acquiescence soever this principle may be entertained in the world, yet whoever shall find in his heart to call it in question, may, if I mistake not, perceive it to involve a manifest contradiction, for what are the forementioned objects but the things we perceive by sense; and is it not plainly repugnant that any one of these, or any combination of them, should exist unperceived?” Sec. IV.—“From what has been said, it follows there is not any other substance than spirit, or that which perceives,” Sec. VII.—“But it is evident, from what we have already shown, that extension, figure, and motion are only ideas existing in the mind, and that an idea can be like nothing but another idea, and that, consequently, neither they nor their archetypes can exist in an unperceiving substance. Hence it is plain, that the very notion of what is called matter, or corporeal substance, involves a contradiction in it.” Sec. IX.—But both MALLEBRANCHE and BERKELEY admitted the individuality of the soul, and its distinctness from the divine nature; for the latter remarks, in the same treatise, “From what hath been said, it is plain that we cannot know the existence of other spirits otherwise than by their operations, or the idea excited by them in us. I perceive several motions, changes, and combinations of ideas, that inform me there are certain particular agents like myself which accompany them, and concur in their

* Principiorum Philosophiæ, Pars Secunda, sect. I.

production. Hence the knowledge I have of other spirits is not immediate, as is the knowledge of my ideas ; but depending on the intervention of ideas, by me referred to agents or spirits distinct from myself, as effects or concomitant signs." Sec. CXLV.

It is however in Germany only, and during the last forty years, that metaphysicians have attempted to discover an absolute unity, which differed from the identification of the Supreme Being with the universe, and from Spinozism ; but the only original works on the subject which I have read, are some of the writings of FICHTE and SCHELLING, and these, as well as the accounts given of the metaphysical systems that have prevailed during that period in Germany, are so obscure, that it is almost impossible to understand them. Friend and foe, indeed, admit the dark profundity of KANT's speculations, and both FICHTE and SCHELLING have published complaints of their opinions having been misunderstood.

FICHTE even thought it necessary to publish a short work, entitled "Advice to the Public, clear as the Sun,"* in which he exposes the real principles of his system, and endeavours to rectify the erroneous notions entertained respecting it. But in this very work he complains of the difficulty, which the imperfection of language opposes to his rendering his opinions intelligible, and wishes that he could explain them by a system of figures, each of which had a known and positive value. At the same time he expressly declares, that the scope of his system has never been spoken or explained by words, and that it even admits not of being so explained, but must be comprehended by intuition. This remark seems to be quite correct, for this system is founded on the assumption that there is absolute identity between the subject and the object, which is denoted by FICHTE by this formula $A=A$. Former metaphysicians, however, were of opinion that from an identical proposition no conclusion could be drawn. But FICHTE disdains to employ logical reasoning in support of his opinions, and contents himself with appealing to intuition. Hence he gives, in page 186 of the tract above referred to, the following explanation of the fundamental principle of his system, which the reader is expected to find clear as the sun : "Egoism (die Ichheit) is subject-objectivity, and nothing else

* The title at length of this work is a most singular one. It is "Advice, clear as the Sun, to the Public, respecting the Real Nature of the Newest Philosophy ; an attempt to compel the Reader to Understand. By Iohann Gotlieb Fichte."

whatever; the considering that the subject and its object, consciousness and conception, are one and the same; and that there is absolutely nothing except this identity." Nor does FICHTE conceal the consequences which must result from this system, since he begins the last dialogue of this tract with these words: "I see thee, my reader, stand there in astonishment; and thou seemst to think,—is there nothing further than this? a mere picture of actual life is presented to me, which spares me nothing that exists in life; a faint representation in pallid colours of all in nature that I have daily before me, without trouble or labour. And for this purpose shall I subject myself to fatiguing study and wearisome thought, &c."

In this tract, however, FICHTE does not explain in what manner the *I*, that is both subject and object, becomes conscious that other *I*'s similarly constituted actually exist, or whether the *I* is dependent for its consciousness on itself, or on some superior being. But in his work, entitled "A Guide to a Holy Life," occur these passages: "Except God there is nothing real, or in the proper sense of the word *there*, and except the intimate conviction of this truth (*wissen*), for that is absolutely and immediately the presence of God himself; and, as far as we possess that conviction, we are ourselves implanted in the divine nature. All else which appears to us to have existence—substances, bodies, souls, ourselves, in so far as we ascribe to ourselves a personal and independent being—is not real and actually existent; but they exist in consciousness and thinking, as the conception and the thought, and in no other way whatever."* "God is essentially one without plurality, he is always of one substance without change or transformation, here is he now present, even as he essentially is, one without change or transformation; and we ourselves partake of his divine presence, so that also in us, in so far as we partake of his divinity, no change or transformation, no plurality or multiplicity, no separation, or distinction, or sundering can take place. So must it be, as it cannot be otherwise therefore it is."† From these passages it would appear, that FICHTE had formed some conception of the absolute unity which is the peculiar tenet of the *Védānta*; but his earlier opinions respecting God, evidently prevented him from constructing a system in conformity to these conceptions; for even in the greatest part of this work he expresses himself

* Page 64, Fourth Lecture.

† Page 69, Fourth Lecture.

in a manner that shows he did not clearly understand, what he himself meant by the union which he supposed to exist between the human soul and the divine nature.*

SCHELLING, also, has found it necessary to explain his system, in a work written partly in support of it, and partly in refutation of that of FICHTE, and has in it exposed his opinions in a clear and decided manner. For instance, "As it is, also, a philosophical knowledge of God to consider him as the alone positively existent, so is it a knowledge of God to consider him as the only actually existent in the actual or natural world, and this is natural philosophy."

"Were it not natural philosophy, then must it be asserted that God exists only in the world of thought, and consequently that there is nothing positive in the actual or natural world, and thus the idea itself of God would be taken away."

"That which is, is reality, and reality is, that which is. What the philosopher thinks, and concerning which he speaks, must be, and therefore it must have reality. That which is not, is not real. The philosopher, therefore, who discourses about nature as if it were nothing, speaks not of a reality, and speaks himself nothing that is true, while he gives to the unreality of which he is speaking, a reality which it does not possess. True philosophy must speak of what actually exists, of nature as it is. God is essentially that which is; say then, God is essentially nature, and nature is essentially God. Hence all true philosophy, that is, such as leads to a knowledge of the only real and positive, is *ipso facto* natural philosophy."†

"According to which opinion, this eternal phenomenal interchange of the substance and form into one another, is the kingdom of nature, or the eternal birth of God in things, and the like eternal absorption of all things in God; so that, according to its real essence, nature itself completely exhibits the divine presence, or God displayed in the actuality of his life, and in a manifestation of himself."‡

* In this work FICHTE talks of man being love, and of that love being transfused, melted, and poured into the divine nature, see p. 199. His notions, therefore, respecting the union of the soul with God, seem to be of a mystical nature, rather than to indicate that he had formed any conception of the human soul being actually an undivided part of the Supreme Soul.

† Darlegung des Wahren Verhältniss der Natural Philosophie, &c. p. 15.

‡ Ibid. p. 60.

“ Except the Godly world, which as such is also unintermediately the actual one, there is positively nothing than the arbitrary thinking of individuals, by means of which the world may be changed into a dead and absolute plurality, though nothing will hence be necessarily changed. Herr FICHTE has imagined such a dead and endlessly imperfect world; will he assert that this has for him an actual existence, then must he also assert that he can see and does see, what neither is nor can be, *i. e.* that his senses have become erroneous and disordered. He who lives and moves merely in imagination, and holds his doing so as an absolute necessity, ventures, notwithstanding, to say, out of this imagination, to the natural philosopher, that he imagines things to be different from what they are; he, the dreamer, alleges that the real perceptions of him who is awake are nothing but dreams.”*

These passages will be sufficient to shew that SCHELLING's system has no resemblance to the *Védānta*, and, most ingeniously as he has supported it, the idealism which he ascribes to it is more apparent than real—at least, let God be once considered as Nature, and Nature as God, and the difference between this and other systems of material pantheism must depend on mere metaphysical distinctions, which have no real existence.†

To these remarks it may be objected, that they merely consist of a *cento* of quotations; but in the discussion of a disputed subject, it seems to me that the adducing only the opinions of the writer, without explaining the grounds on which such opinions rest, can never prove satisfactory to the

* Darlegung des Wahren Verhältniss der Natural Philosophie, &c. p. 121.

† Such reasoning as the following displays much metaphysical ingenuity, but is it in the least convincing?—“ But (SCHELLING supposes some one to object) *I actually see matter as extended in space, multiform, divisible, and circumscribed.* This, I answer, is the fundamental error, namely, the notion that thou seest this. Thou mightest as well assure me that thou seest spots in the sun, for thou merely convertest thy not seeing into seeing. Thou beholdest, whether thou knowest it or wishest it, only the eternal unity of the bounden and the bond, *i. e.* the bond itself; all the rest thou mayst conceive or imagine, but never in any manner really perceive it. So, from what has been said, plurality is in no manner visible; it can only be seen where it is manifested in unity, *i. e.* when it is no longer plurality. Thou canst conceive plurality, and as such it exists in thy conception, but otherwise it is neither reality nor what actually is, since that is always *one.*”—*Ibid.* p. 62. But unless this supposed identity between God and Nature be a mere mental abstraction, a mere *ens rationis*, I do not perceive how a system which maintains that this universe positively exists, and that all things proceed from and return unto the divine nature, can be considered to differ from other systems of material pantheism.

reader. Unusually numerous, therefore, as these quotations no doubt are, they will enable the peruser of this paper to form his own judgment with respect to the point in question : namely, whether the *Védānta* is a system^(a) of material pantheism or emanation, or whether it is not one which has attained to the *ne plus ultra* of transcendentalism. In the latter case as it is unquestionably founded on the *Védas*, it must have been invented at least three thousand years ago ; and, consequently, it cannot but excite surprise that man at that remote period should have been capable of entering into such abstruse speculations, and of forming conceptions to the sublimity of which no philosopher of Europe has ever attained. Hence Sir WILLIAM JONES hesitated not to remark : I have not sufficient evidence on the subject to profess a belief in the doctrine of the *Védānta*, which human reason alone could, perhaps, neither fully demonstrate nor fully disprove ; but it is manifest that nothing can be farther removed from impiety, than a system wholly built on the purest devotion.”*

Bombay, 5th December 1831.

VANS KENNEDY.

* Works, Vol. I. p. 166.

NOTE.

(a) It will be evident from what has been said in pp. 412-414 that the learned writer is under a misconception regarding Mr. COLEBROOKE's idea of the *Védānta* system of philosophy. With respect to the views expressed in the *Parmenides* of PLATO, it may be said that it was owing to the *form* of their investigation *not being sufficiently general*, that the Pythagoreans, and their followers the Platonists, could never arrive at truth in their speculations on the nature of the Deity. Any contemplation of his essence with reference to number, shape, size, quality, or proportion must lead to fallacious results, and can only tend to confound him with his works. To say therefore that the Deity is *το ειναι* is to say that he is concrete, that is, that he is material. The mystic notions of Pythagoras about number and fire ever misled him and his followers in their search of truth. It is undoubtedly true that when we contrast the Deity with the gods of polytheism we call him *one* ; and we must do the same when we speak of him or his attributes in a theological sense as the moral governor of the universe ; but the case is altogether different when we philosophize upon the nature of his essence in the abstract.

G. C. H.

XXVII.—*Observations on the Lacquered or Japanned Ware of Ava.* By
Major HENRY BURNEY, Political Resident at Amarapura.

Read the 18th of February 1832.

THIS manufacture has been named Lacquered Ware, from an idea, I suppose, that lac forms a part of it; but this is a mistake, no lac is used, and the bright red colour is given by vermilion, which is made by the Burmese from cinnabar (*ayain*), imported by the Chinese caravans from *Yun-nan*.

The principal material is known to be the Burmese varnish, or *Theet-tsee*, which means literally “wood oil.” There must be a great abundance of it in this country, as the usual price at the capital is only three-quarters of a *tical* per *viss*, or about five-pence per pound; but it is often much adulterated, and requires to be strained through a piece of cloth before being used. There are three descriptions of it in Ava. The first and purest is called *Theet-tsee ayoung-den*, from *ayoung* colour, forming of itself a beautiful black colour. The second is called *Theet-tsee anee-byau*, from *anee* red, being that commonly used with vermilion or red colour. This is said to have one quarter of water mixed with it. The third and worst description is called *Theet-tsee tha-yo-byau*, from *tha-yo*, a paste, which will hereafter be described, and to make which this *theet-tsee* is generally used. This last kind has no less than one-half of water mixed with it, and there is said to be no difficulty in making water combine with the *theet-tsee*, by rubbing the two well together in the sun. The price of the best *theet-tsee* is just now at Ava seven *ticals* for ten *viss*.

The Burmese workmen declare that the varnish will not “*ait*,” sleep, or lie, or dry well, if collected from the tree when it is in fructification, which, they say, occurs during the three months of January, February, and March. Nor will the lacquered-ware, during the process of manufacture, become soon and properly “*ma*,” or hard, in the dry hot months before the rains set in, or at any time so well as when it is lodged, as Dr. WALLICH understood, “in dark and cool subterraneous vaults.” The varnish is

placed in the sun for a few minutes before it is used, and being almost always applied with the hand, the smallest grain of sand or other extraneous substance is immediately detected and removed. When first applied, it looks of a light brown colour; but while the hand is rubbing on the varnish, it becomes darker, until it attains a beautiful black colour. Sometimes, when the frame-work is of wood, a piece of tow is used for rubbing the *theet-tsee* on, and generally, to save the hand, the first coat is applied with a rude brush made of the fibres of the coco-nut husk. After using the varnish, the hand is cleaned with a little mustard-seed oil and coarse cloth or tow. Upon asking the workmen if they did not suffer any bad effects from the varnish, as I recollected reading of some one at Edinburgh having suffered severely, they admitted that they often, and particularly when they first begin to work in it, find their hands blister, and their arms and faces swell, but that some people are much more predisposed to suffer in this manner than others. Hence they have a kind of proverb:

*Theet-tsee thek-thè thee,
Loo ma-then p'hyet-thee,
Loo then atwa ma shee.*

“ Varnish is a true witness,
It affects a man not true,
To a true man it matters not.”

About one in a hundred is said to be so predisposed. Some of the workmen told me that they always use their left hands in taking their food; and that sometimes the injurious effects of the varnish appear in blotches so much resembling leprosy, that other Burmese refuse to hold intercourse with workmen so affected. These effects, however, are removed by applying to the parts affected a composition made of teak-wood rubbed on a stone with a little water: sometimes sandal-wood as well as teak is used, but the latter is considered as the real specific. As a preventive, many workmen occasionally swallow a small quantity of the varnish.

The *theet-tsee* itself, as before observed, forms a beautiful black colour; but to improve its brilliancy and transparency, the article covered with it is often polished in the same manner as the Burmese polish their fine marble, with petrified wood powdered very fine, repeatedly washed and then dried; and for this purpose, the petrified wood of a particular tree,

called *En-gyen*,* is much esteemed. A little of some scented wood is added, but this is apparently not indispensable.⁽²⁶⁾† This polishing powder is called *En-gyen kyook tshoorwe amhoun*.

There are few colours which will preserve their tint when mixed with this varnish; vermilion answers best. The Burmese prefer a vermilion which they make themselves, to that brought from China, and it is certainly of a much brighter scarlet. Only one man at the capital, and he is attached to the palace, is said to know how to make this vermilion, which is called *Han-za-pada yowè*,⁽²⁷⁾ from the colour resembling that of the little scarlet seed with a black spot, named *glycine abrus*, or *abrus maculatus*, in MARSDEN'S Sumatra, third edition, page 171. There are two other descriptions of vermilion made at Ava, called respectively *han-za-pada-ayè*, and *han-za-pada-gouk*, which last seems more like our red lead. The vermilion brought from China is called *han-za-pada-atshoun*, and the Burmese say, that it is the refuse or grounds of the finest kind, and that it does not mix well with the *theet-tsee*. Red ochre or Indian red, called *myè-nee*, red earth, gives a duller colour, and is used for lacquered ware of the coarsest description. It is sometimes used also as a first coat, over which the vermilion is applied. These paints, when used, are first made liquid with a very small quantity of an oil brought from Laos, called *Shan-zee* or *Shan* oil, and then mixed with *theet-tsee*, in the proportion of three parts of the varnish to five of the vermilion. This *Shan-zee* is said to be extracted from the fruit of the *Kuniyen* tree,‡ the trunk of which yields the common wood oil, used in the manufacture of torches at Tavoy and Mergui. The Burmese, however, say that the *Shans* conceal the manner of making this oil, because if it could be manufactured in Ava there would be no occasion for importing it from Laos. It sells at Ava for four ticals per viss. The *Kuniyen* tree, which is so abundant to the southward, and which affords the inhabitants there so cheap a substitute for candles, cannot be very common near the capital, where I have never seen a torch, the petroleum only being used by all classes for lights. A mixture of this *Shan* oil and *theet-tsee*, ten parts of the latter to three of the former, is used as a semi-transparent varnish. When put over any other than black,

* The same tree is mentioned in the inscription on the Rangoon Great Bell.—See *Asiatic Researches*, vol. XVI. p. 271 and 276.

† The numbers within brackets refer to the list at the end.

‡ *Dipterocarpus turbinatus*.

it darkens the colour a little, but adds much to its brilliancy and transparency. The Burmese possess no really transparent varnish, and it would be satisfactory to know if any could be obtained from the *Theet-tsee*, by distillation or other means.

There are three descriptions of lacquered-ware in Ava. The first, and by far the best articles, are brought from the *Shan* countries, "*Shan-pyee-ga*." They may be distinguished by the lightness and elegance of the manufacture, and the superior brilliancy of the varnish and colours. The next are those manufactured at a place called *Nyoung-oo*,* and its neighbourhood, near the ancient capital, *Pugan*. These are generally distinguished by their being of yellow or green colours, and almost all the small betel-boxes, "*Kwon-eet*," in use among the Burmese, are of this kind. The best of this kind are made at *Pugan* itself, and called after that town; but the larger proportion is named from *Nyoung-oo*. The last and worst description of articles is manufactured in the city of Ava and its environs; and these are to be distinguished by the coarseness of the work, its plain red colour, and the frame being generally of wood and not of basket-work. Most of the plain red large boxes with high conical covers, *T,hamen-tsa out-gyee*, and other vessels used by the Burmese for holding food, are of this description. The lacquered boxes from Laos have upon them tasteful figures and other ornaments of a beautiful black colour, or of gold, and those from *Nyoung-oo* have them of yellow or green colours. Many of these boxes are so thin, that you may discern the basket-work through the varnish. The best ware is tried by seeing whether the edges of two sides can be made to meet, without cracking the colour or breaking the article. I believe none but a few *Shan* boxes will bear this test.

The different figures and ornaments on the lacquered ware are executed in the following manner, called *Yowon t,ho*, or engraving after the manner of *Yowon*, which was the general term formerly applied by the Burmese to Northern Laos and *Zen-may*, but which, and sometimes with *Gyee*, or great, added, is the name now given to Cochin China only. After the last coat of

* *Nyoung-oo* means "Fig-tree Point."—The name of this place, where Lieut. JOHN NORTH, one of our early Envoys to Ava, died, and was buried on the 30th August 1755, has been strangely used. Captain BAKER writes it *Young-owe* and *Pegang Youngue*—SYMES *Nioundoh*—COX *Gneayan*, *Gucayne*, and *Gucaym*—CRAWFURD *Nyaung-ngu*—and WALLICH *Gnaunee*. The Burmese lower classes scarcely pronounce the *ng* of *Nyoung*, which has led a friend of mine to write the name *Gnee-a-oo*.

varnish has been applied, and it is thoroughly dry, figures, lines, &c. are described, by the lacquered ware being scooped or scratched, just deep enough to remove two or three coats of the varnish, with rude steel tools, ⁽¹¹⁾ either sharp-pointed, or having the point slightly divided. The latter instrument is called *tsout*; ⁽²⁵⁾ it is used like a gouge, and guided by the thumb of the left hand, whilst the right is scooping out the lines. The former instrument, called *gouk*, ⁽²⁵⁾ is often nothing more than a broken needle tied to the end of a small piece of stick; and it is used to describe the circular lines, the lacquered-ware being turned round with the help of the knees and left hand against the instrument held steadily in the right hand. It is surprising how quickly the workmen use these rude gravers, which are sharpened with a piece of slate usually brought from *Shwè-zet-tau* on the road to Arracan, and called *Shwè-zet-tau-kyouk*. While sharpening, the instrument is held against the forefinger of the left hand, and the slate, moistened with a little spittle, is rubbed against it. The edge also of the slate on one side is made fine for the purpose of being rubbed within the divided point of the *tsout*. When the figures and ornaments are finished, a coat of vermilion and *theet-tsee* is put over the whole surface of the ware, and allowed some days to dry. The ware is then placed on the lathe, and turned round against some wet bran pressed down upon it with the left hand, and occasionally washed in water. This process rubs off all the vermilion from those parts which are in relief. A second and a third coat of vermilion is applied, and partially removed in the same manner. It is then placed in the sun for a few minutes, and when perfectly dry, a coat of the semi-transparent mixture before described is put on, rubbed off with a piece of cloth, and a second coat put on, which is allowed some days to dry, for the *Shan* oil always takes a long time to harden. This kind of engraving is the most tedious and expensive, and it is called *Shan Yowon t,ho*, the *Shan Yowon* engraving, from the circumstance of all *Shan* boxes being so ornamented. The *tsout* or *gouk*, somewhat in the manner of our wood engraving, scoops or cuts all the surface except the figures and ornaments required, which remain black, the colour of the original ground; whilst those parts only where the gravers have made the hollows or incisions are afterwards filled up with red. The *Shan Yowon*, though executed by Burmese workmen, can never be made to look so well as that done in the *Shan* countries, owing either to the *theet-tsee* not being so fresh and pure, as the workmen allege, or to the *Shans* making use of some other materials unknown

to the Burmese, which last, I am inclined to think, is the more probable cause. The Burmese also state, that the *Shans* allow their lacquered-ware several months to dry between each stage of the manufacture. But a much more easy and expeditious mode of engraving is the *Burma d,ho* or *Burma Yowon t,ho*. It is usually executed over a coat of vermilion, but it may be done before that colour is given, and upon a black ground. The figures and ornaments here are cut in the style of our line engraving, ⁽¹³⁾ and when completed, some plain *theet tsee* is rubbed over the whole, and immediately wiped off with a piece of cloth. A little *Shan-zee* or *Shan* oil is then rubbed on, and wiped off in the same manner. Some yellow sulphuret of arsenic, or orpiment, called by the Burmese *tshè-dan*, and by natives of India *hartal*, is powdered fine, and rubbed dry over the surface of the lacquered ware. The mineral adheres only to the lines cut or scooped out, ⁽¹⁴⁾ and displays at once in a bright yellow colour the figures and ornaments designed. Nothing further is done unless a finer polish is required, in which case the polishing powder before described is used, after the lapse of some days. Sometimes a little of the orpiment is mixed with *Shan* oil and *theet-tsee*, and a coat of it put over the whole ware and wiped off, and the powdered mineral then rubbed on. This process seems to be the best, as the hollows and incisions of the gravers are more filled up in this manner. The orpiment is powdered very fine, and large quantities of it are rubbed on the ware with the fingers. Green *atsein* is put on in the same manner, the colour being previously made with the *tshe-dan*, and either the juice from the leaf of a plant called *gwè-douk-beng*, or indigo, ten parts of *tshe-dan* to one of indigo. I have tried to use some English lamp black, Prussian blue, and chrome as this orpiment is used, but without success; probably other of our paints, or even these with some addition, might be employed in this simple and expeditious style of ornamenting wood-work or lacquered-ware with the aid of *theet-tsee*. The Burmese admire much these kinds of engraving, but I think the plain scarlet or black surfaces, when polished, look better. The different kinds of japan work are always distinguished, if engraved, with the epithet *yowon t,ho*, *yowon t,ho thamen-tsa out-kyee*, *yowon t,ho kwon-eet*, &c. &c.

As the best mode of ascertaining the manner in which the ware is manufactured, I engaged at different times two parties of Burmese workmen to attend at my house, and prepare some cups in my presence, when I had an opportunity of daily watching their progress. The first party consisted of rather rude workmen, but the second was sent to me by the Burmese

ministers, and some among this party prided themselves upon having made betel boxes for her majesty the Queen.

A frame of bamboo basket-work⁽¹⁾ of the size and description required, was first made over a wooden form or *poun*; the finer the basket-work, the lighter and finer will the lacquered-ware appear when finished. There are two kinds of bamboo used—one called *myen-wa*, for the coarser kind of basket-work, and the other *ten-wa*; and there are three kinds of weaving or “*ayet*” of the basket-work required for lacquering. The first and finest, and that of which all the smaller *nyoung-oo* boxes, and almost all *Shan* boxes are made, is called *kyoung-lein yet*.⁽¹⁸⁾ The second, used chiefly for cups, except the rims, which are of the first pattern, is called *katein-gya-yet*.⁽¹⁾ The third is used for the large round boxes, and for any coarse work, and this is called *powet kyoung-yet*.⁽⁴⁵⁾ The frame-work of the large lacquered boxes, with high conical tops, is almost always of separate pieces of wood joined together.

Upon the outside only of this basket-work,⁽²⁾ with the wooden form inserted, a thin coat of *theet-tsee* was applied with a brush made of the fibres of the cocoa-nut husk. This was allowed three days to dry—not in the sun, but in a cool sheltered part of the house, within an old wine chest, which had a layer of earth at the bottom and its inner sides covered with mud. The box was shut up also, so as to prevent any dust from falling upon the article—yet the workmen complained that the varnish did not dry so hard or quickly as it would have done in a subterraneous vault. Every house in Ava where this ware is manufactured, has a deep cellar or vault, in which the ware is lodged during the time the varnish is drying. In some *Shan* boxes, parts of the basket-work are left plain, and are not covered with *theet-tsee*, and of these the basket-work is very fine and delicate.

At the end of three days a kind of paste was made and put over the basket work.⁽³⁾ There are several kinds of this paste, which is called *tha-yo*, probably from *tha-yowot*, mortar. One kind is made of bones calcined and pounded, sifted through a piece of cloth very finely, and then mixed with the *theet-tsee* into the consistence of paste. This is called *ngowa-yo-bya-tha-yo*, “cow’s-bone ashes *tha-yo*,” or simply *amè*, or *ayo-bya-tha-yo*, “bone ashes *tha-yo*.” Another kind, and which is most commonly used, is made of bran or the husks of paddy burnt, and the ashes sifted and mixed with the *theet-tsee*; this is called *phwè-bya tha-yo*, “bran ashes *tha-yo*.” A third kind is made of the saw-dust of teak-wood mixed, without being

burnt, with *theet-tsee*; this is called *kywon-theet-lhwa-za-tha-yo*, "teak-wood saw-dust *tha-yo*," or simply *lhwa-za-tha-yo*, "saw-dust *tha-yo*:" it is of a thicker consistence than the other two, more like mortar, and moistened with a little spittle as it is applied. This paste is used in filling up any little holes, and joining on the stands or different pieces together; and the separate parts of the frame-work of the high conical-boxes⁽¹⁵⁾ are fixed together with this cement, which becomes as hard as wood, and which would really assist the famous project of "converting saw-dust into deal boards." The ornaments, like little rails, fixed around the sides of some of the boxes, are made with this *tha-yo*, pressed with little tin moulds or stamps into the pattern required, and then fastened on. A fourth kind of paste is made with the ashes of cow-dung, *ngowa-gyee-bya*, sifted finely and mixed with *theet-tsee* which has been put over a fire until beginning to boil: the two are then well mixed and beat together, whence this paste is called *tè-tha-yo*, or "beaten *tha-yo*." This looks like putty, and is used principally by gilders in fixing flowers or other ornaments upon wood-work, to which it adheres very tenaciously; and before it hardens it is so pliable and elastic, that it may be drawn out into the finest lines and twisted into any shape. But much of the cheapest and coarsest description of japanned ware, manufactured at *Nyoung-oo*, is said to have the basket-work covered with a paste of cow-dung and mud only, over which one or two coats of *theet-tsee* are applied. This paste is always liable to crack, and to chip off the basket-work, and the Burmese consider this kind of manufacture, in which very little *theet-tsee* is used, as an imposition.

All the above descriptions of paste form good cements for joining wood-work. For this purpose the best kind is a mixture of the "bone-ashes *tha-yo*" with a little teak saw-dust; and I have found it answer as an excellent substitute for glue, not being so liable to be affected by damp weather: it is only longer drying, as much as five or six days. It answers very well, also, in filling up the cavities left in fine cabinet-work, when the thin black edging has broken or fallen off. When dry, it must only be rubbed smooth and even with a stone, in the manner hereafter to be described.

To return to the cups which the Burmese workmen prepared under my eye. On the second day, the rim of the cup⁽³⁾ was cut round smooth, and the fine description of basket-work at the top was scraped and thinned with a knife, so as to bring it more on a level with the other part. The hole at

the bottom, where it is fixed to the form while weaving, was filled up with a little of the "saw-dust *tha-yo*." The whole, inside and outside, was then covered over with a paste made of *theet-tsee*, bone-ashes, and saw-dust, three parts of bone-ashes to one of saw-dust. The workmen called this the *tha-yo-gyan*, or coarse *tha-yo*, declaring that for this first coat of priming this mixture of the two was best, as adhering most closely to the bamboo basket-work. It was applied with the fingers.

At the end of three or four more days, the rim of the cup was cut still more even, and the cup was fastened to a lathe called *tset-khoun*,⁽⁴⁾ and the inside was ground perfectly smooth and even, in the manner that will shortly be described. A coat of *ayo-tha-yo*, "bone-ashes *tha-yo*," or *tha-yo-akhyau*, "fine *tha-yo*," was then put on with the hand in the inside, and laid smooth with the finger which was occasionally dipped in water. At the lathe, the left hand is employed on the cup, whilst the machine is turned to and from the workman with the right hand, by means of a long stick tied to a leathern string that has two turns around the lathe. Forms or chucks of the size required are fixed to the spindle of the lathe, with little pieces of bamboo; and when the outside of the cup is to be turned, the cup is fitted to these chucks, which enter about an inch and a-half within it. But when the inside of the cup is to be turned, a cylinder of coarse basket-work open at both ends, called *tsee*, is fixed to the chuck, and within this cylinder the whole of the cup is lodged, and fastened, if necessary, with little slips of bamboo at the sides. To make the coat of coarse *tha-yo* perfectly smooth and even, the cup is smeared over with a little water and a kind of red earth, and then turned against a piece of pumice stone, and occasionally moistened with more water. The cup was placed in the sun to become perfectly dry before the fine *tha-yo* was put on. The large boxes ^(15, 16, and 17) with high tops are fastened to a different kind of lathe; the upper end is either inserted into one side of the lathe, or fitted on a pin there, and to the bottom is fixed a piece of wood, which revolves around another piece fastened to the other side of the lathe: the two sides of the lathe may be made to approach or recede, as required to hold the ware between them: the string is put round the box, and the left hand usually moves the stick, whilst the right holds the pumice-stone, &c. Usually one coat only of *tha-yo* is put on the wood-work of these boxes, but they are rubbed smooth, and even *three* times, with the different kinds of stone: once after the *tha-yo*, once after the first coat of varnish, and the last time after a second coat of the varnish.

The *tha-yo* is put on at once over the wood, and there are three coats of varnish before the vermilion is applied.

At the end of three more days, ^(5, 6) the cup was again fixed to the lathe, and the outside was treated in the same manner as the inside had been before, the coat of coarse *tha-yo* on the outside being rubbed smooth and even, and when perfectly dry a coat of fine *tha-yo* put on. The workmen said that it is better to do only one side at a time.

At the end of three more days ⁽⁷⁾ the cup was fixed to the lathe, and the inside made smooth and even with a kind of sand-stone, called *kyouk-pyen-gwè*, and a little water; then with a rag and a little finely powdered teak-wood charcoal and water; and lastly, with a moist piece of cloth. When perfectly dry in the sun, a coat of plain *theet-tsee* of the best kind, or *theet-tsee ayoung-den*, was put on in the inside with the finger. This was done in the sun, to which the cup was afterwards exposed for about a quarter of an hour. The workmen seem to prefer always to use the varnish in the sun. Besides the *kyouk-pyen-gwè*, which is the same kind of stone as that on which the Burmese grind sandal-wood to rub over their bodies, there is a stone of a finer grain sometimes used, called *shwè-gan-gyauk*, from the circumstance, I am told, of gilders using it to polish the articles they intend to gild.

At the end of four more days ⁽⁷⁾ the cup was fixed to the lathe, and the outside was treated exactly in the same manner as the inside had been on the preceding day, ground smooth, and covered with a coat of fine *theet-tsee*.

At the end of five or six more days, for the varnish did not dry sufficiently before that time, a second coat of the fine varnish, or *theet-tsee ayoung-den* ⁽⁸⁾ was put on the outside and inside of the cup.

Before applying a coat of vermilion, the cup was fixed to the lathe, ⁽¹⁰⁾ and the polish of the two fine coats of *theet-tsee* was removed, by turning the cup against the stone *kyouk-pyen-gwè* only, and afterwards against some bran and water pressed upon it with the left hand. This operation was also performed, and some powdered teak-wood charcoal and water with a rag were used to remove the transparent effect of the fine *theet-tsee*, before the polishing powder ⁽⁹⁾ above described, *en-gyen kyouk-tshoorwè amhoun*, was used; in doing which the cup was turned against the palm of the left hand, smeared with a little of the powder.

In gilding, the wood-work is primed two or three times with the *ayo-bya* or *phwè-bya tha-yo*, and rubbed quite smooth and even with the stone and

water before the gold leaf is put on; which is done, as Dr. WALLICH describes, "by besmearing the surface very thinly with the varnish, and then immediately applying the gold leaf." The priming is of course here necessary to fill up the cavities in the wood, and produce an equal surface before the gold leaf is put on. A little piece of cotton is dipped in the varnish and rubbed slightly over the work, and before the surface is dry, the gold leaf is put on with the thumb and finger, and gently smoothed over with another clean piece of cotton. The gilders also use a brush of the thickness of a man's thumb, with which small pieces of gold leaf are taken up and introduced into cavities or hollow ornamental parts of the wood-work, in the same manner as our gilders use a squirrel's tail. This brush is made of the hair taken from the inside of cows' ears, and the workmen declared that it requires a hundred cows to make one brush. I had a picture-frame gilt, and although the gilding has not the lustre of one of ours, it has the advantage of adhering to the frame; for the Burmese priming does not break and chip off as the coat of whiting over our picture-frames does. The Burmese have no idea of burnishing their gilding; and if their priming would take the burnisher, their gilding would not only equal ours in lustre, but, being more durable, would be preferable. The workmen could make nothing of a dog's tooth, which I pointed out to them as a burnisher; but this was owing probably to our not knowing the exact time of applying it. The priming on their wood-work is about one-half of the thickness of the coat of whiting on one of our picture-frames, but of course it could be made thicker, if necessary; and it would be useful to know, if the gilding over their priming could be burnished. In Siam, most of the gold leaf used for gilding is imported from China, but the Burmese prefer to make their own, and they beat it far too thin, for it is full of holes, and requires to be doubled in many places, which not only leads to much loss but prevents the gilding from appearing so smooth as that of the Siamese. They also mix a great deal of alloy with the gold from which they manufacture the leaf, contrary to what Colonel SYMES was informed; and hence the gilding of all Burmese pagodas and public edifices soon looks dull and shabby, particularly where exposed to the weather. Few remains can be now traced of the gilded *kyoungs* seen by SYMES at *Amarapura*, nor is there any gilding now to be seen on the great Arracan gun. The splendour of the King's palace at Ava, although the gilding has not been executed more than eight or nine years, is not so great as it must have been when Mr. CRAWFORD visited this

capital : and the gilding of the *shwè-da-gon* pagoda at *Rangún* now looks very black and shabby ; whereas at *Bangkók*, I recollect the Portuguese Consul pointing out to me the excellent state of preservation of the external gilding of a pagoda, which was described to have been gilded no less than sixty years before.

All the different purposes to which the *theet-tsee* is applied in this country can scarcely be enumerated. It is *boiled* and used for writing on polished tables of wood or ivory, particularly in the *Pali* character. The umbrellas of all classes are made with paper and two or three coats of varnish ; over which, whenever required, gold leaf is easily put on in the manner above described. Cheap buckets are made by covering a coarse bamboo basket-work with only two or three coats of this varnish. Almost all domestic utensils are made with this substance and basket-work or wood. I should think very light portmanteaus or *patahahs* might be made, by applying over a bamboo frame-work this varnish and the *tha-yo*, which, filling up all the cavities, would render them impervious to water ; rattan might be too heavy, and the priming might not adhere so well to its polished surface. It is necessary to mention, that the surface of the *theet-tsee*, when kept, is always covered over with two or three inches of water, to prevent the varnish from drying or becoming hard.

Observing that Dr. WALLICH had never seen the *theet-tsee* tree in flower, I requested Dr. RICHARDSON, during his late overland journey to the frontiers of *Manipura*, to bring me a specimen. He passed through extensive forests of the tree from a place called *Myagu*, about five days' journey from Ava, to the *Manipura* boundary. The trees were very large, and had a beautiful appearance, from being covered with flowers so abundantly that the leaves were concealed, and the trees were one mass of white. The bark appeared quite dry, and no juice was oozing at the little slips of bamboo which he saw sticking in the trunks of the trees. The flower has a fragrant scent, resembling that of apples, and the Burmese eat the young buds in *curries*. I send a specimen of the flower, which Dr. RICHARDSON brought to me last month (February).

The account given under the article 'Japanning,' in REES's Cyclopædia, of the varnish used in China and Japan, "composed of turpentine and a curious sort of oil," and of the *lack*, "sap or juice of a tree occasioning swellings in the hands and faces of the people who use it," answers a good deal to the *Shan* oil and *theet-tsee* here described ; yet the Burmese workmen,

upon examining a piece of japanned ware of China, considered it to be made of a different material, unknown to them.

With this paper, I send the following articles* used by Burmese japanners, and specimens of their manufacture :

No.

Fourteen *akhwet* or cups, shewing the japan-work in the different stages of manufacture, *viz.*

1. Frame of basket-work.
 2. A coat of plain *theet-tsee*, applied to the outside of the basket-work, after the rim has been cut round.
 3. The upper basket-work scraped thin with a knife, and the rim cut smoother ; then the hole at the bottom of the cup filled up with *lhwa-za tha-yo*, or saw-dust *tha-yo*, and a coat of the *tha-yo-gyan*, or coarse priming of *theet-tsee*, calcined bones and saw-dust, applied to the inside and outside.
 4. The inside ground smooth on the lathe with the pumice-stone, red earth, and water.
 5. The outside ground smooth in the same manner, and the inside covered with a coat of the *tha-yo akhyau*, or fine priming of *theet-tsee* and calcined bones only.
 6. The outside as well as inside covered with the fine priming.
 7. The outside and inside ground and made smooth on the lathe with the *kyouk-pyen-gwè* stone, teak-wood charcoal, and water, and with a wet cloth.
 8. Two coats of *theet-tsee ayoung-den*, or first kind of varnish applied.
 9. Outside finished with the polishing powder.
 10. Inside and outside covered with a coat of the first kind of vermilion, or *han-za-pada yowè*.
 11. The *Shan yowon-t'ho* or engraving, before the incisions and hollows of the gravers have been filled up with vermilion.
 12. The *Shan yowon-t'ho* completed, and a coat of the semi-transparent mixture put on.
 13. The *Burma d'ho*, or *Burma yowon-t'ho*, before the yellow or green colour has been applied.
 14. *Burma d'ho* completed. The *tshe-dan* or orpiment rubbed on, and the polishing powder applied.
- Three *tha-men-tsa out-gyee*, or dinner-boxes, manufactured at Ava, and shewing this japan work in the different stages of manufacture, *viz.*
15. The wooden frame-work joined together with saw-dust *tha-yo*.
 16. The same covered with a coat of *phwè-bya-tha-yo*, which has been ground smooth on the lathe.
 17. The box completed, having had three coats of *theet-tsee* over the *tha-yo*, before the vermilion was put on.
 18. A basket-work frame of a *kwon-eet* or betel box, shewing the *kyoung-lein-yet* or weaving. Cup No. 1, is a specimen of the *ka-tein-gya-yet*, excepting the border round the rim, which is of the first kind of basket-work.
 19. A Burmese bucket of basket-work.

* Now in the Society's Museum.

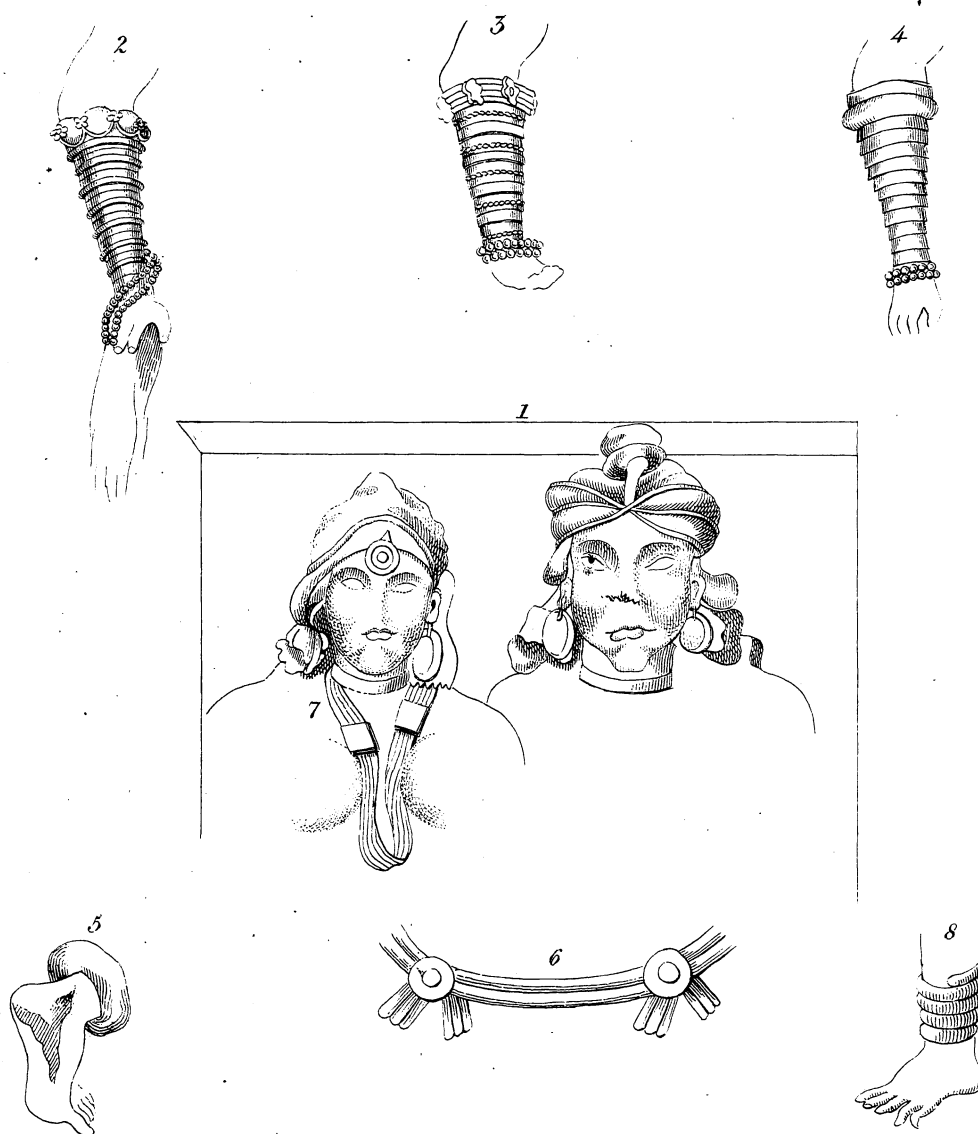
No.

20. Specimen of the *Myen-wa* bamboo.
21. Ditto of the *Ten-wa* bamboo.
22. Shewing how the *ten-wa* is cut for weaving basket-work.
23. A small deal box covered with the fine priming, and a coat of the first kind of varnish—a part of this box is gilt.
24. A packet containing specimens of *kyouk-pyen gwé*, *shwè-gan-gyouk* and *gè*, and other stones used in the manufacture of lacquered-ware; also, some of the red earth used with the *gè*, and a brush made of coco-nut fibre.
25. A packet containing two *tsout*, one *gouk*, and a piece of *shwè-zet-tau-kyouk* or slate.
26. One packet, containing a piece of petrified *en-gyen* tree, with some of the polishing powder, called *en-gyen kyouk tshúwè amhoun*.
27. One do., containing four specimens of vermilion: *han-za-pada yowè*, first sort; *han-za-pada ayè*, second sort; *han-za-pada gouk*, third sort; and *han-za-pada atshoun*, Chinese vermilion; and a specimen of the Chinese cinnabar or *ayain*; a piece of *tshe-dan* or *hartál*, and of *atsein* or green paint.
28. One packet, containing a little Burmese gold leaf, said to be manufactured from gold of *ko-mú*, or nine *mú* touch.
29. One form or *poun*, on which the basket-work of cups is wove, with a cup upon it.
30. One Burmese lathe, or *tset-khoun*, with a chuck or *poun* fixed to it with slips of bamboo.
31. One chuck or *poun*, for ditto, shewing how the cup is fixed to the lathe.
32. One *tsee* or basket cylinder, for ditto, shewing how the cup is lodged in it.
33. One *Shan kwon-eet* or betel-box of red colour, shewing the *Shan yowon-t'ho* or engraving, imported from Laos.
34. One *Awa kwon-eet* or betel-box of green colour, showing the *Burma yowon-t'ho*, manufactured at Ava.
35. One *Nyoung-oo kwon-eet* of yellow colour, and of a coarse description, manufactured at *Nyoung-oo*, and shewing the *Burma yowon t'ho*, suspected to have the mud and cow dung priming only.
36. One *Awa kwon-eet* of black colour, finished with the polishing powder; manufactured at Ava.
37. One *Pugan kwon-eet*, of yellow colour and of a superior description, shewing the *Burma yowon-t,ho*; manufactured at Pagan.
38. One small *let-pek-out*, or box for keeping *let-pek* tea; coarse, and made in Ava.
39. Three bottles of the *theet-tsee ayoung-den*, first kind of Burmese varnish.
40. Two do. of *theet-tsee anee-byau*, second do. do.
41. One do. of *theet-tsee tha-yo-byau*, third do. do.
42. One do. of *amè-bya*, or *ayo-bya*, calcined bones powdered and sifted fine.
43. One do. of *phwè-bya*, ashes of paddy husk sifted fine.
44. One do. of *Shan-zee*, or *Shan* oil.
45. A specimen of the *powet-kyoung-yet* style of bamboo basket-work.

H. BURNEY.

Ava, March 9, 1831.

PERSONAL ORNAMENTS.
common to the figures in the
BAUDDHA CAVE of CARLI,
and the
People^s called Brinjaris.



- Fig 1.... Alto relievo figures male & female, in the 3rd compartment on the right of the doorway vestibule of Carti Cave shewing the peculiar head dress and ear ornaments. From the injury done to the latter it is not clear whether they are rings or solid wheels.
- 2.3.4.... Various armlets on the female figures in the different compartments.
- 5.... Anklet on the female figure. 3rd Compartment.
- 6.... Necklace on the male figure. 3rd Compartment.
- 7.... Necklace on the female figure 3rd Compartment.
- 8.... Anklet on another female figure.

XXVIII. *Remarks on the Identity of the Personal Ornaments sculptured on some Figures in the Budd'ha Cave Temples at Carli, with those worn by the Brinjaris.* By Lieut.-Colonel WILLIAM HENRY SYKES, F.L.S., F.G.S., &c.

Communicated by the BOMBAY BRANCH of the Royal Asiatic Society.

Read the 17th of March 1832.

I AM induced to offer to the Society a sketch* of the personal ornaments on the *alto-relievo* figures, male and female, in the *Budd'ha* cave temple of *Carli*, from having remarked an apparent identity in the majority of the sculptured ornaments, with those worn by that remarkable, erratic, carrying and armed, but essentially pastoral people, the *Brinjaris*; a people whose origin and history admit of further development. My acquaintance with the *Brinjaris* is too limited to justify me in advancing any opinion on a community of taste between them and the ancient *Budd'has*, and although such community, if existing in the constitution of European society, would not excite attention, it will be considered, at least, curious in India, where the classes of society are not less marked by caste than by habits of life, opinions, dress, and personal ornaments.

Should the identity I have noticed, open to any future inquirer into the origin and history of the *Brinjaris*, a new channel for the prosecution of his labours, my object in laying this sketch before the Society will be fulfilled.

I have used the term "carrying," in speaking of the *Brinjaris*, in allusion to their practice of employing their bullocks in thousands, to transport grain, salt, &c. over the country. When not occupied in their transit labours, these people are found pasturing their cattle on waste lands, and at this period they live principally on the milk of their cows. They always dwell in small tents, consisting of pieces of cloth stretched over horizontal poles supported on two sticks, the walls of the tents being made of bullock packs piled on each other.

(Signed) W. H. SYKES.

* See accompanying Plate.

XXIX. *Account of the Pearl Fisheries of the North-West Coast of the Island of Ceylon. By Captain JAMES STEUART, Master Attendant at Colombo. Communicated by Lieut. Colonel WILLIAM M. G. COLEBROOKE, of the Royal Artillery, F.R.S., M.R.A.S., &c. &c.*

Read the 2d of February 1833.

It would give me great pleasure, were it in my power to explain the little I have remarked on the nature of the pearl-oyster, in the style the subject requires. Having had opportunities of obtaining a general knowledge of most fisheries, I cannot but regret that my attention was so wholly absorbed by professional pursuits, that very little was bestowed on the natural history or habits of the animal in question.

Encouraged, however, by a desire to assist inquiry, I shall feel most happy if I can be the means of furnishing the naturalist with any information respecting the pearl-oysters of Ceylon, which he may not have the means of acquiring by personal observation.

The natives of this country have an idea, that pearl oysters are rained from the clouds; the origin of this supposition I attribute to the well-known effect of water-spouts passing over the sea.* Leaving the subject of generation (on which the natives have many ridiculous opinions) to the learned and scientific, I shall notice the first appearance of pearl-oysters, when they are seen in immense clusters floating about the sea, so minute in size that a casual observer would pass the floating masses as fish spawn of some kind, but never would suppose them to be oysters.

In this state, the sport both of the wind and the current, they are driven round the coasts of Ceylon, until increased size causes them to sink to the bottom; they then attach themselves to rock (which is generally coral) or any heavy substance, by means of a beard, with which nature has furnished them similar to the muscle, or they adhere in clusters to each other. I have heard that some naturalists consider what is called the pearl-oyster to

* Perhaps also to the fact that, in some parts of the East, the spawn of certain fish is suspended in vapours, and brought down by the rain.

be properly a muscle, on account of its beard and the broad hinge of the shell. I will venture to say, however, that all fishermen would call them oysters, not only from the appearance of the shells, but also from that of the fish itself. On removing a wooden buoy that for about six weeks had been attached to an anchor in this port, it was brought on shore covered with pearl-oysters nearly as large as a shilling. The finest pearl in possession of the *Mavicaire* of *Killicarre* is said to have been obtained from a bank off *Chilaw*, but it appears that oysters very seldom arrive at perfection on any banks except those off *Arippo*; the coral banks off the coasts of this island, lie from one to six or eight miles from the shore, generally exposed to the strength of the monsoons and currents: those near *Arippo* appear to be the least exposed.

The three last fisheries on the *Arippo* banks have been in five and a-half to seven fathoms water, protected on the west and south-west by a ridge of sand and coral extending from the north point of an island called *Caredivan*. Coming from sea-ward, the depth of water over this ridge is two and three-quarters or three fathoms, but it rapidly deepens to seven fathoms in the immediate neighbourhood of the oyster beds, while, besides this peculiar protection from the violence of the south-west monsoon, the coral banks to the northward of the pearl banks are in many parts nearly level with the surface of the sea, and may form an essential safeguard to the oysters from the effect of the currents in the north-east monsoon.

Thus secure in deep water lie the quiescent oysters, adhering to their coral homes, until age has enfeebled the fibres of their beards, when most of them break from their hold, and they are found in perfection on a sandy bottom near the coral beds. Two-thirds of the oysters taken up last fishery were from such a situation.

One of the most intelligent divers I have met with, fixes the age of the oyster at six years and a-half, when it breaks away from the rock: he does not think it can forsake the rock at its own pleasure, but when separated, it has the power of moving, on a sandy bottom generally, with the hinge directly in advance. When I first sounded on the ridge which runs from *Caredivan* Island, I was struck with its importance as a guide to the particular spots of oysters, and was surprised I had never heard of its existence. I caused inquiry to be made, and after some time, was informed that the traditional account of it by the natives of that part of the country is, that a powerful queen once resided at *Codremalli*, and that the dead from the city were

placed on an island thus situated in the sea, and which has since disappeared. I am however inclined to believe the ridge is rising coral and sand.

The best pearls are generally found in the most fleshy part of the oyster, near the hinge of the shell, but they are also found in all parts of the fish, and adhering to the shells. I have known sixty-seven pearls of various sizes found in one oyster. It is by no means certain that every oyster contains pearls, and they are seldom found in those oysters which would be selected as the finest for eating: this favours the opinion that pearls are produced by disease in the fish, and therefore pearl-oysters are seldom eaten, being considered unwholesome. If a pearl be cut in two pieces, it will be seen that it is formed of separate coats or layers similar to an onion, and is no doubt composed of the same matter as the shell.

Persons who may have been in the habit of considering a pearl-oyster as a treasure, will be astonished to learn that a bushel of them can be purchased at *Arippo* during a fishery, for a less sum than a bushel of common oysters at Feversham or Colchester. What therefore could have been the idea of those who induced the pearl-fishery company to send out diving-bells to fish with?

Before the fibres of the beards break, and the oysters separate, they are in immense heaps and clusters; a diver, describing how thick they laid on the bank, placed his hand to his chin; but a more intelligent diver estimated the depth of the beds of oysters seldom to exceed eighteen inches, and explained that large rocks at the bottom, when covered with oysters, may be mistaken for heaps of oysters.

Pearl-oysters are said to arrive at perfection in seven years; and after attaining this age, they soon die. I have heard of an attempt being made to remove pearl-oysters, as common oysters are removed in Europe, to richer and more secure ground, but without success. I once attempted to convey some alive from *Arippo* to *Colombo* by sea, having the water frequently changed, but on the second day they were all dead.

The boats used at pearl-fisheries measure from eight to fifteen tons, and are without decks. The head and stern are nearly alike, the latter having a slight curve, and the stern-post being generally straight: both have considerable rake, but the stern has most; a boat that will measure forty feet over all, will not exceed twenty-eight feet in length at the bottom. They have no keel; the bottom is round, and the breadth of the boat increases to the top of the gunwales. They are rigged with one long rude mast, and

carry one lugsail, made of light cloth loosely sewed to a tight coir rope, so that it blows out very much ; or, as a sailor would say, it is roped tight, bags, and stands badly on a wind. These rude fittings subject them to frequent accidents ; and they often require the assistance of the boats of the master-attendant's department to tow them to shore.

With a favourable wind they sail very well, but cannot hold to the wind, or beat against it. They leave the shore with the land-wind about midnight, to proceed to the bank, a distance varying from nine to twelve miles ; they are led by the *Adapanárs'* boats, in the direction of the government guard-vessel, which is at anchor close to the fishing-ground, with lights hoisted on board to guide the boats to the place.

If they reach the bank before daylight they anchor close to the government-vessel until half past six o'clock, when the inspector hoists the signal to commence diving. When the weather is settled and favourable, the land-winds begin to die away as the sun gets up, by nine or ten the sea is quite calm, and at noon (when the gun is fired from the government-vessel for all diving to cease) a pleasant sea-breeze springs up, with which they run the boats to land.

When the regular land and sea-breezes are interrupted, which frequently occurs, they have to use their paddles (long sticks, with an oval piece of board lashed on the end), for the purpose of oars ; and sometimes the fishery is stopped, until the return of favourable weather with regular land and sea-breezes.

The crew of a boat consists of a *tindal* or master, ten divers, and thirteen other men, who manage the boat, and attend the divers when fishing ; each boat has five diving stones, the ten divers relieving each other, so that five divers are constantly at work during the hours of fishing.

The weight of the diving-stones varies from fifteen to twenty-five pounds, according to the size of the diver ; some stout men find it necessary to have from four to eight pounds of stone in a waist-belt, to enable them to keep at the bottom of the sea till they have filled their net with oysters : the form of a diving-stone resembles a pine, and it is suspended by a double cord.

The net is of coir-rope yarns, eighteen inches deep, fastened to a hoop eighteen inches wide, fairly slung to a single cord. On preparing to commence fishing, the diver divests himself of all his clothes except a small piece of cloth ; after offering up his devotions, he plunges into the sea, and swims to his diving-stone, which his attendants have hung over the side of the boat ; he then places his right foot or toes between the double cord on

the diving-stone, and the bight of the double cord being passed over a stick projecting from the side of the boat, he is enabled, by grasping all parts of the rope, to support himself and the stone, and raise or lower the latter for his own convenience, while he remains at the surface; he then puts his left foot on the hoop of the net, and presses it against the diving-stone, retaining the cord in his hand; the attendants taking care that the cords are clear for running out of the boat.

The diver being thus prepared, he raises his body as much as he is able, drawing a full breath, and pressing his nostrils between his thumb and finger, he slips his hold of the bight of the diving-stone double cord, from over the projecting stick, and descends as rapidly as the stone will sink him.

On reaching the bottom, he abandons the stone (which is hauled up by the attendants to be ready to take him down again) clings to the ground, and commences filling his net: to accomplish this, he will sometimes creep over a space of eight or ten fathoms, and remain under water a minute; when he wishes to ascend, he checks the cord of the net, which is instantly felt by the attendants, who begin hauling up as fast as they are able; the diver remains with the net until it is so far clear of the bottom as to be in no danger of upsetting: he then pulls himself up by the cord, which his attendants are likewise pulling, and when by these means his body has acquired an impetus upwards, he forsakes the cord, places his hands to his thighs, rapidly ascends to the surface, swims to his diving-stone, and by the time the contents of his net have been emptied into the boat, is ready to go down again. A single diver will take up in a day from one thousand to four thousand oysters.

They seldom remain above a minute under water: the more common time is from fifty-three to fifty-seven seconds; but when requested to remain as long as possible, I have timed them from eighty-four to eighty-seven seconds: they are warned of the time to ascend by a singing noise in the ears, and finally by a sensation similar to hiccough.

Many divers will not venture down until the shark-charmer is on the bank, and has secured the mouths of the sharks: while some are provided with a written charm from their priests, which they wrap up in oil-cloth perfectly secure from the water, and dive with it on their persons. Others, being Roman Catholics, appear satisfied with an assurance from their priest that they have his prayers for their protection; but I am informed they are all happy to secure the interest of the shark-charmer.

This worthy man is paid by the government, and is also allowed a perquisite of ten oysters from every boat daily during the fishery.

On my first visit to the pearl banks, the shark-charmer informed me that he obtained the charm from his father ; that the only real power of securing the mouths of the sharks was possessed by his family, and that it would be exceedingly dangerous to trust it to any other person ; he also gave me to understand that if he were to explain the charm to me, it would lose its virtue in my possession. I requested him to charm a shark to appear alongside the vessel ; he said he could do it, but it would not be right, his business being to send them away. At several subsequent visits I renewed my request without effect.

During the few days we were employed marking off the ground to be fished, a shark was seen and reported to me ; I instantly sent for the shark-charmer to be brought before me, and desired him to account for permitting a shark to appear at a time when alarm might have a serious influence on the success of the fishery. He replied that I had frequently requested him to summon a shark to appear, and he had therefore allowed this one the liberty to please me.

When on board the "Cumberland" south-seaman, I remember seeing a man bitten by a shark ; the crew were employed cutting the blubber from a dead whale alongside the ship, and on these occasions it is necessary for a man to go on the whale to hook on the blubber to be hoisted into the ship : the man has a belt of canvas round his waist fastened to a cord, held by a man on deck. At these times innumerable birds and hungry fish assemble round the ship. The unfortunate man had one foot pressed into the flesh of the whale, and the other stretched in the sea, when the second mate observing a shark in the act of seizing the man's leg, with great presence of mind and admirable precision, darted his spade (the instrument he was using to cut the blubber) at the neck of the monster, and nearly severed the head from the body, at the moment that the animal had seized the man's leg ; the teeth of one jaw made a serious wound, but the teeth of the other jaw only made a number of small holes in the skin ; in six weeks the man was able to resume his duty. It is only when pressed by hunger that sharks are so bold ; they are naturally timid, and would rarely venture near a body of divers. The noise made by the boatmen when at work is the great protection.

The pearl fisheries off *Aripoo* take place in March, when the north-east monsoon has abated, and before the south-west has commenced. The pearl

banks are examined in November, between the close of the south-west monsoon and commencement of the north-east, by the collector of *Manár*, who is the supervisor, attended by the inspector and the interpreter. The vessels employed on these examinations are a government guard vessel, two sailing-boats from the master-attendant's department at *Colombo*, and about eight native fishing-boats (as before described) from *Mandár* and *Jaffna*; on these occasions the boats are furnished with one diving-stone and two divers. Five or six native head-men, called *adapanárs*, also attend, and go in the boats to see that the divers perform their duty, and to take notes of the reports given from time to time by the divers for the information of the supervisor. Samples of the oysters are taken up and forwarded to *Colombo*, with a report on the state of the banks, by the supervisor. On these samples depends the decision of government as to a fishery in the following March.

So many years had passed since the fishery of 1814 without one of any consequence having taken place, that it gave rise to various conjectures as to the cause of the failure. Some were of opinion that violent winds and currents buried the oysters in the sand, or drove them entirely away; some supposed the *adapanárs* and divers employed at examinations, gave false reports, and that the banks were plundered by boats from the opposite coast. It was also said that former fisheries had been so extensive as to have injured the oyster-beds; the natives attributed it to various devouring fish, and also to a failure of seasonable rain, which they deem absolutely necessary to bring the oysters to perfection.

To prevent plunder, a government vessel has been kept stationed on the banks during the season of the year that boats can visit them; and to insure correct reports, diving-bells have been used to enable Europeans to go down at examinations.

Without venturing to contradict a pretty general opinion, that the failure of the pearl fisheries for so many years has been owing to the effect of strong winds and currents, I am not at the same time prepared to admit that this has been the cause. Too much confidence in the knowledge of the *adapanárs* may have led to error, and consequent failure; they are not like the experienced fishermen of Europe; indeed they are not fishermen at all, they do not even know how to manage their boats.

How often for weeks, during winter gales, cod-smacks cruise about the North Sea, without a glimpse of land, the master unable to write his name,

and yet so skilful is he, that without the use of figures, when he has obtained his cargo of fish, he shapes his course for a market, making Cromer or Lowestoff with a precision that would do credit to a circumnavigator. Ever anxious for the success of his voyage, if the wind be contrary, the master will not trust the helm to other hands, but night and day continues at the helm until favoured by the wind, or until worn out by fatigue he can stand no longer. Energy like this is no where to be found within the tropics, and cannot be expected of the *Adapanárs*: but I certainly did expect to find them leading men in their profession, excelling the common fishermen of the country. They appear to read the compass, and to have the same fixed courses, as steered by their ancestors, from *Arippo* to their variously named pearl banks; but they are useful men, only as a medium of communication between the divers and the officers of the fishery. Little, indeed, appears to have been the improvement of the fishermen, or their means of fishing, since the days when the pearls of CLEOPATRA's ear-rings were landed at *Condatchy*.

The pearl banks off *Arippo* and *Condatchy* lie at a considerable distance from the low land, with few remarkable objects in view; the banks are extensive, the masses or beds of oysters are of various ages, according to the season in which they may have settled. Very many of these masses or beds are by no means so extensive as has been imagined, and nothing is more easy than to mistake one bed for another, particularly by the *Adapanárs*, who are guided chiefly by the course they steer from the *dorric* at *Arippo*; and that which they call the north-east *Chival*, to-day, may be called the south-east to-morrow.

I have heard that samples of oysters have frequently been taken up by order, from banks inspected the previous year, and found nowise improved, and sometimes the samples have been younger. This, I venture to say, shews that although there has been no difficulty in finding plenty of oysters on the banks, there has been great difficulty in finding the same spot a second time; and it proves that the greatest care and skill are necessary to mark the particular spots, beds, or masses on the bank from whence the samples are taken, and that this cannot be expected by mere compass bearings and soundings, or even by astronomical observations. It requires an union of talent and professional tact, with alacrity in the pursuit; and should it ever happen that the person possessing these requisite acquirements, be placed at the head of the establishment for a sufficient length of time,

considerable improvements in the fishing, with a facility and certainty of increased revenue, will be the result, and all difference of opinion, doubt, and suspense, will be at an end.

* * THE following letter from the Right Honourable Sir ALEXANDER JOHNSTON, V.P.R.A.S., with the Note accompanying it, is inserted as bearing reference to the Map of the Pearl Banks, which has been prepared to illustrate the preceding paper.

To GRAVES C. HAUGHTON, Esq., M.A., F.R.S., Secretary to the Royal Asiatic Society.

19, Great Cumberland Place, March 30, 1833.

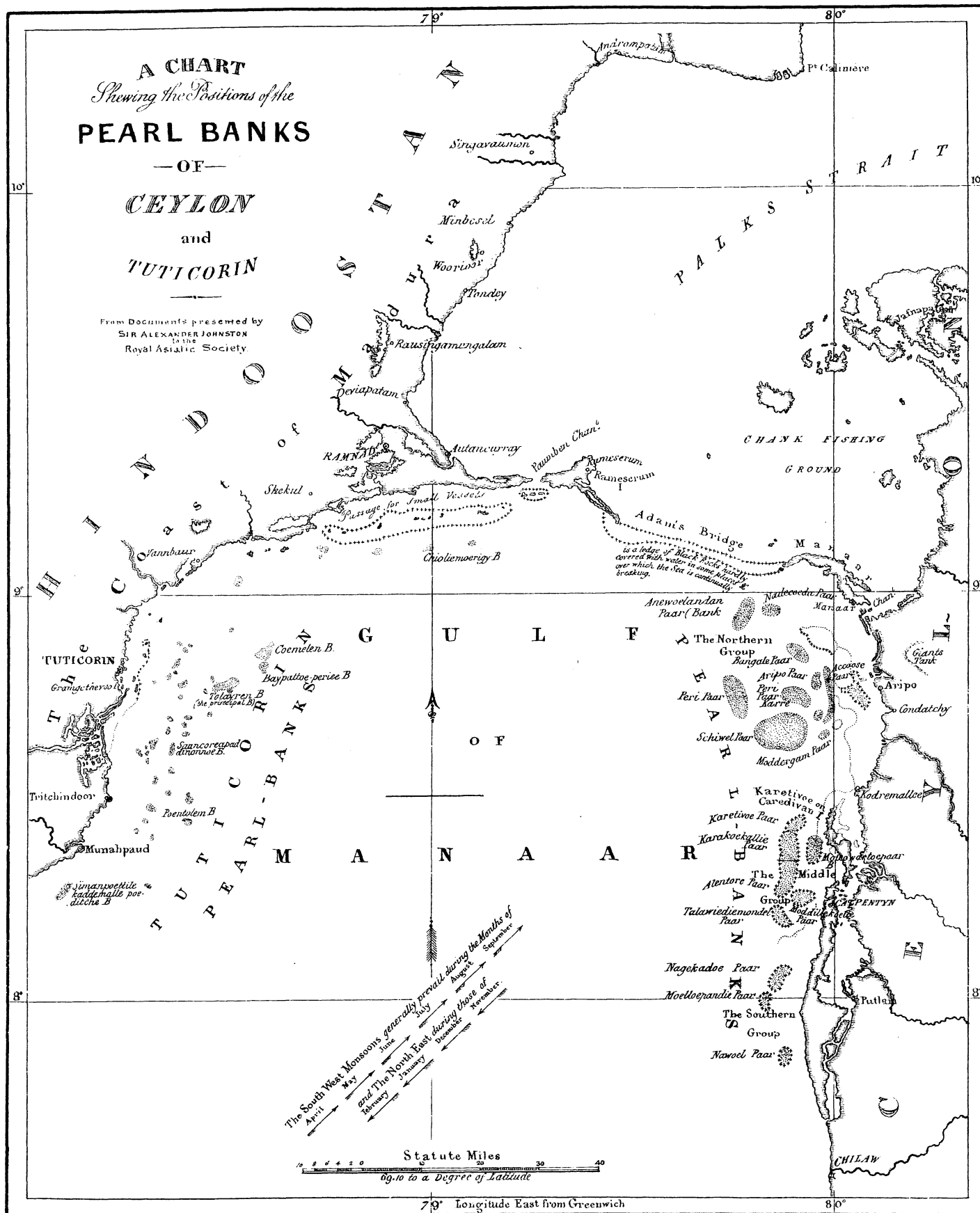
SIR :

I beg leave, in answer to your letter of the 16th of February, to recommend to the Council that Captain STEUART'S "Account of the Pearl Fisheries on the North-West Coast of the Island of Ceylon," be printed in the *Transactions* of the Society; and that, in order to enable the public to become better acquainted with the relative situation of the Pearl-banks, a copy be annexed to it of the map of the gulf of *Manár*, framed by Mr. HERBERT, of the Colonial Office, principally from the materials which I presented to that office some time ago, and which I collected while I was on the Island of Ceylon, with a view of explaining a report upon the fisheries, geology, and natural history of the gulf, which I made to the late Marquess of LONDONDERRY, the then Secretary of State for the Colonies, in 1809, when I submitted to his Lordship a plan for changing the system observed by the Ceylon government, in the management of the Pearl and Chank* fisheries on the North-West Coast of Ceylon, for placing all the Pearl and Chank banks in the gulf of *Manár*, as well those belonging to the East-India Company as those belonging to the Crown, under one and the same management; and for executing without delay a survey of the whole of that Gulf by able and scientific men, who could procure on the spot for His Majesty's Government such information relative to the history,

* The Chank-shell, or *Voluta gravis*.—Vide *Transactions of the Royal Asiatic Society*, vol. i. p. 543†, note (B).

A CHART Shewing the Positions of the PEARL BANKS —OF— CEYLON and TUTICORIN

From Documents presented by
SIR ALEXANDER JOHNSTON
to the
Royal Asiatic Society.



Drawn for the Royal Asiatic Society by J. J. H. H. H.
Litho. 7 Charlotte Street, Fitzroy Square.

the winds, the currents, the marine productions, and the coral formations* of every part of the gulf, as might enable them to form a scientific and a deliberate opinion upon all the questions connected with the Pearl and Chank fisheries, upon the practicability, expense, and advantages of widening and deepening the passage between the peninsula of India and the island of *Rámiseram*, called the *Paumbam*, and that between the island of *Manár* and the island of Ceylon, called the *Manár* Pass; and upon the measures necessary to render those two passages again what they were from the remotest age to the fifteenth century, an efficient cause of the agricultural and commercial prosperity of the several countries situated between Cape *Comorin* and Point *Calymere*, on the peninsula of India, and between the ancient town of *Mantotte* and the celebrated harbour of *Trincomalee* on the island of Ceylon.

I have the honour to be, Sir,

Your most obedient humble servant,

(Signed) ALEX. JOHNSTON.

NOTE.

IN this Report, Sir A. JOHNSTON alludes, in addition to other information, to that which he had derived from the following sources :—First. From the accounts given by the *Hindús* of the several historical facts, upon which the *Hindú* poet who composed the *Rámayana* (a Sanscrit poem, said by the *Hindús* to have been composed many centuries before the Christian æra), founded the description which he gives of the conquest of the island of Ceylon, the destruction of its tyrant *RÁVANA*, and the deliverance of *SÍTA* from her imprisonment on that island by *RÁMA*, whom he supposes to be the tenth incarnation of *VISHNÚ* : of the manner in which *RÁMA* and his army crossed over the gulf of *Manár* from the peninsula of India to the island of Ceylon, along the ridge of rocks known at present by the name of ‘*ADAM’s Bridge* ;’ and of the various circumstances under which *RÁMA*, after his return from Ceylon, built a temple on *Rámiseram*,

* The late Marquess of LONDONDERRY, upon the recommendation of Sir ALEXANDER JOHNSTON, intended in 1810, had he remained in office, to have sent a naturalist out to Ceylon for the express purpose of investigating the natural history of the Pearl-oyster, the Chank-fish, and the Coral insect in the gulf of *Manár*. The Pearl-oyster and Chank-fish are sources of considerable revenue to the Ceylon government, and the coral insect is a most active agent, as is well known, in bringing about some of the greatest changes on the surface of the globe. Such an inquiry, therefore, must be at all times an object of great public interest.

the *Insula Solis* of the Romans, an island situated between the peninsula of India and the island of Ceylon, from the meridian of which many of the *Hindú* astronomers commence their calculations, and a place as celebrated in the south as *Jaggannátha* is in the north of the peninsula, for its sanctity amongst the *Hindús*, and for the number of *Hindú* pilgrims who resort to it annually from every part of India.

Second. From the accounts given by the *Muhammedans* of the historical facts to which they trace the traditions that prevail amongst them, that the island of Ceylon was the place to which ADAM retired after he had been driven out of Paradise; that the high peak on that island, called 'ADAM'S Peak,' was the spot on which he was buried; that the ridge of rocks extending across the gulf of *Manár*, from the island of *Rámiseram* to the island of *Manár*, and known by the name of 'Adam's Bridge,' is the bridge by which he passed over the gulf of *Manár*, when coming from the peninsula of India to the island of Ceylon, and that the two large tombs on the island of *Rámiseram* are the tombs of ABEL and CAIN.

Third. From the accounts given by the Portuguese histories of the introduction of the Catholic religion by St. FRANCIS XAVIER, in the sixteenth century, amongst the people called the *Parawas*, and *Marawas*, who lived along the northern shores of the gulf of *Manár*, of the martyrdom suffered by six hundred of the Catholic converts in the island of *Manár*, of the success of the Jesuits in the conversion and instruction of the inhabitants of the kingdom of *Jaffna*, and of the political, moral, and commercial effects which were produced on the natives of the different countries situated on that gulf by the measures which the Catholic missionaries adopted for the purpose of extending the Christian religion amongst all the different castes of fishermen who were employed in the Pearl and Chank fisheries.

Fourth. From the accounts given by the Dutch histories of all the Dutch factories established along the Southern Peninsula of India between Cape *Comorin* and Point *Calymere*, particularly from the history of that established at *Tuticorin*, which is near the Pearl and Chank banks off the coast of *Madura*, and is the place of residence of some of the most wealthy and powerful of the *Parawas*, who possess considerable influence over most of the divers who are employed in the Pearl and Chank fisheries which are situated along the south-east coast of the peninsula and the north-west coast of the island of Ceylon.

Fifth. From the ancient traditions that prevail in India relative to the great convulsion of nature which, in a very remote age, is believed to have caused the sea to break through the Southern Peninsula of India, and form the gulf of *Manár*, separating what is now the most southern part of that peninsula from the island of Ceylon.

Sixth. From the description of all the different Pearl and Chank fisheries in the gulf of *Manár*, of which there are accounts in any *Hindú*, Greek, Roman, Venetian, Portuguese, Dutch, or English history, and from the several *Hindú* works upon the size, weight, colour, shape, and various species of pearls which are found on the different Pearl Banks.

XXX. *Some Remarks upon the ancient City of Anarājapura or Anarādhepura, and the Hill Temple of Mehentélé, in the Island of Ceylon ; by Captain I. J. CHAPMAN, of the Royal Artillery, &c. &c.*

Read the 21st of July 1832.

IN December 1828, when quartered in Colombo (Ceylon), I joined a party on a shooting excursion, in the course of which we visited *Anarājapura*, and some other places of interest. Having made a few rough sketches and some memoranda, which I have been led to believe are not devoid of interest, and having found that the information which I procured on the spot is borne out and confirmed in a remarkable manner by the *Mahāvansi*, the *Rājavali*, and the *Rājaratnācari*, three native histories, for translations of which, now in progress of publication* by Mr. UPHAM, we are indebted to Sir ALEXANDER JOHNSTON, I have been induced to lay a few of the outlines and memoranda before the Society.

The remains of the ancient city of *Anarājapura*, or *Anarādhepura*, are situated in the interior of Ceylon, in about 8° 15' N. lat. and 80° 35' E. long., in the district of *Neura Wanny*. Its position is laid down, in the map to DAVY's Ceylon, under the name of *Anarajahpoora*. In a map published in 1822 by Captain SCHNEIDER, the surveyor-general of the island, it is called *Anurajapoorā*; in SMITH's Atlas, it is called *Anarodgburro*; in the map to BALDEUS, its place is marked as 'the 1,000 Pillars;' in the map to ROBERTSON's 'India,' it is called *Anurogrammum*; in PTOLEMY's 'Geography,' by F. BERTIUS, it is laid down as *Anurogramum regia*; and in the works above named, it is called *Anuradhe-Pura*.

According to the native records, *Anarādhepura* was, during the long period of nearly thirteen hundred years, with occasional short intermissions, both the principal seat of the religion of the country and the residence of its kings. It is represented as having been very extensive and populous; as abounding in sumptuous and magnificent buildings; and as having been held in the

* These works have been published since this Paper was read.

greatest veneration by the followers of BUDD'HA. At the present moment, the only remaining traces of the city consist of nine temples, if I may so designate them; of the residence of the priests; of two very extensive tanks; of several smaller ones in ruins; of groupes of pillars; and of portions of walls, which are scattered over an extent of several miles.

The nine temples are still held in great reverence, and are visited periodically by the *Budd'hists*: they are all situated to the westward of the *Arippo Aar*, or *Arippo* river, and stand at some distance from each other; the space between the most remote being at least three miles. They consist, first, of an enclosure, in which are the sacred trees, and which is called the *Bo Malloa* or *Bodin Vahansé*; second, of the Thousand Pillars, called the *Lowá Mahá Páya*; and third, of seven mounds or *Dagobas*, each of which has a distinct name given by its founder.

The *Bo Malloa*, or enclosure of the sacred trees, is by far the most important of these objects, the trees are not only held in reverence as sacred to BUDD'HA, but because "they came from Siam some centuries ago, and planted themselves in a miraculous manner."

The building itself is of granite, and consists of a series of four rectangular terraces, rising out of each other, and diminishing both in height and extent. It is quite plain, and devoid of any other ornament than a bold and simple moulding at the base, and cornices approaching much in character to the Grecian. In the centre of the side facing to the north, thirteen broad steps lead to an altar, on which were offerings of flowers; the terrace is then continued, so as to afford a passage to another flight of steps on the western side, which passes under a door-way, or rather arch, and leads to the third terrace. This door-way is stuccoed with *chunam*, and has some grotesque figures in relief upon it. Immediately opposite there is another altar, with offerings of flowers. The third terrace is continued so as to afford a passage round the fourth, which contains the holy trees. The height of this enclosure does not exceed four feet, nor does it differ in character from the rest. The total height of the terraces was about twenty feet.* The extent of the largest terrace, as ascertained by one of the party, was thirty paces by fifteen.

* In the *Rájaratndcari*, it is said that the tree, when transferred miraculously, stood erect at seven cubits above the earth, which, at twenty-seven inches to the cubit, will give fifteen feet nine inches.

The trees thus enclosed are five * small—I might almost call them branches, none exceeding the thickness of a man's body: they were at the time nearly destitute of leaves in consequence of the unusual dryness of the season, and had any thing but an imposing appearance. Three or four other branches or single trees, equally small, grow out of the other terraces, into which they appear to have been built; and from the expression of the countenance of a priest, when I inadvertently leaned against one, appear to be held in equal reverence with those in the principal enclosure.

At the foot of the principal flight of steps are slabs of granite placed perpendicularly, one on each side, on which figures are boldly sculptured, and between them is a semicircular stone of hard close-grained granite, with simple mouldings, let into the ground.

A colossal figure of BUDD'HA projects from the building to the eastward, and on the same side are the ruins of another enclosure of a similar rectangular form, but of smaller extent. To the westward, at the distance of a few paces, is a low building, a *Vihāra*, of small dimensions, containing several images of BUDD'HA in metal, and in which the priests officiate. This temple is situated in a space of considerable extent (a hundred and twenty-five paces by seventy-five), which is enclosed by a strong stone wall about eight feet in height, and perforated with triangular holes, in which lights are placed on solemn occasions.† The area is planted, in the vicinity of the temple, with trees (*Plumeria longifolia*), whose sweet-smell-

* A memorandum made by one of my companions coincides with mine, as to the number of branches. Whether the number has been purposely selected I cannot decide; at the same time I cannot refrain from pointing out the following coincidences:—In the account of the holy tree, as described in the *Mahāvansi*, it is stated to have had *five* branches, that each branch produced *five* fruits, &c., and that the tree, which was made of coral and precious stones, and deposited in *Ruanwelli Dagoba*, had also *five* boughs spread out. The number of BUDD'HAS is *five*; and although the fifth has not yet appeared, his statue is found in the temples. The æra of the present BUDD'HA is also destined to last *five* thousand years. In the Burmese account of the world, it is stated, that after the dissolution of the former system, which was effected by a flood of waters, a lily of immense height and size arose, having on its top *five* buds and four branches extending from the stalk; the *five* buds contained each a yellow cloth of a priest, and were indicative of the number of BUDD'HAS pertaining to the system; four of them have opened: that the body is the product of *five* elements, that there are *five* sorts of wisdom, that creation was completed in *five* successive acts, and that there are *five* celestial abodes.

† The following occurs on the subject of lamps, in the *Rājaratnācari*, p. 136.—“Moreover, this king having heard of the great merit there was in the offering of lamps, he, besides the sweet perfumes of camphor and other oils, made offerings of no fewer than 125 350 lamps.”

ing flowers are among the favourite offerings to BUDD'HA, and in the more distant parts, with coco-nut and palmyra, among which two mutilated statues of BUDD'HA lie neglected on the ground. The building is called the *Bo Malloa*, the trees the *Bo* tree. I neglected to take any sketch of the temple itself, but fortunately one was subsequently made by Mr. CAMERON, one of the Commissioners of Colonial inquiry, which has already been lithographed, and conveys an accurate idea of its character.

The entrance to the temple is by a building which also faces to the north.* In front of this building is a flight of steps, having as balustrades slabs of hard blue granite, which are elaborately and beautifully sculptured, and of which a sketch was taken.† Between this building and the enclosure is a court, at the end of which, and forming an entrance to it, is a second building of similar character. At the foot of the steps to this second building, and let into the ground, is a very remarkable slab of hard blue granite : it is semicircular, and sculptured in rings or bands of different widths. Some of the patterns are scrolls equal in beauty to any thing Grecian ; one consists of the *Hansá* or *Bráhmāna* duck, bearing the root of the lotus in its bill ; and the most curious has figures of the elephant, the horse, the lion, and the cow, which are repeated in the same order, and sculptured with great spirit and accuracy of outline. Of this there is also a sketch,‡ but it will only convey a faint idea of the beauty of the original.

These comprise the principal memoranda which relate to this temple. I shall now proceed to make a few remarks, and to point out some references which are connected with it.

The reverence in which the *Bogaha* is held by the *Budd'hists* in Ceylon, is attributed either to his having received his divine nature under one of these trees, or to his having been in the habit of sitting beneath it when meditating ; there is also a popular tradition in Ceylon, that “ when BUDD'HA came to the island, it was over-run by demons and evil spirits, who opposed him with all their might and power ; that becoming weak and weary, he sat down under a *Bogaha*, and fell asleep ; that a tremendous storm of thunder and rain came on, and that the devils thought to take advantage of it to surprise him ; but, when they came to the spot where he still slept, they found not only that the tree had protected him from rain, but that a *cobra-de-capella* had spread its hood above his head, and was watching

* See Plate, No. 16.

† See Plate, No. 17.

‡ See Plate, No. 17.

over him." Hence they reverence the tree, and consider the *cobra-de-capella* as the emblem of watchfulness and of benevolence. I have endeavoured to ascertain why the *Bogaha* is held in respect by the followers of BUDD'HA in other places, and find all authorities concur in attributing it to one of the causes assigned, and that the tree was in consequence adopted as an emblem of *Budd'hism*, but it does not appear to form any part of their religious ceremonies. Dr. BUCHANAN (HAMILTON) says that the *Burmese* hold the tree in reverence as a relic of the god, but that it does not appear to be of importance, as it is not mentioned in the summary of religious duties.*

The *Bogaha*, or *Bo*-tree, is stated by some to be the *Ficus religiosa*, or *Pipala*-tree of the *Hindús*, but this is a mistake; the *Bogaha* is the *F. indica*; and so far from being held in reverence by the *Hindús*, it is extirpated with great care in the northern parts of the island, where their religion predominates. It has been suggested to me that this tree was selected in consequence of its being generally found growing out of old buildings; that the practice of building around it is typical of the religion of BUDD'HA having risen out of, and destroyed some other predominant faith; and that it is this allegorical meaning which has caused the hostility I have mentioned.

In the particular case before us, we find in the *Rájaratnácari*, that *Anarádhepura* was one of the consecrated spots visited by the first BUDD'HA, that it was then called *Abayapura*, and that the right-hand branch of the *Bogaha* under which he sat, was transferred there in a miraculous manner; the same is said to have been the case with the *Bogahas* of the second and third BUDD'HAS. We also find that the whole of the three records concur in attributing the transfer of the *Bogaha* of the fourth or present BUDD'HA to *Anarádhepura*, in the two hundred and thirty-sixth year after his death, to the eighteenth year of the reign of king DHARMASÓCA, and during that of king DEWANI PATISSE. This event is thus described in the *Mahávansi*:

"DEWANI PATISSE thus addressed the king:—O King DHARMA SOKA, when BUDHU was yet living, he declared that the time would come when a king of the name of DHARMA SOKA would appear in *Jambudwipa*, and in that king's time the right hand branch of the *Bo* tree should be brought to Ceylon, and that the virtues of the said tree were so strong that he, BUDHU, sitting with his back to the same, had repelled the force of ten thousand *bembaras* of gods, who opposed his becoming BUDHU, and had there been

* Vide *Asiatic Researches*, Vol. vi. p. 177.

freed from all worldly desires through the virtue of the same ; had caused the gods of ten thousand worlds to disappear as if hurled away by a whirlwind ; and as he, BUDHU, could make no offering to the said tree, he had for the whole of the second week gazed at the same without closing his eyes, and promised that during the rest of his (BUDHU's) reign, viz. for five thousand years, the same should be a protection of all the gods, and procure for them the fulfilment of all their desires.".....

" The king DHARMASÓCA, after having put a screen round about the holy tree, ascended the golden ladder, and put a stripe of vermilion with a gold pencil on the right bough of the holy tree ; on which the bough was separated as if it was cut asunder by a saw, because of the king's prayer and the predestination of BUDHU."....." On the day the tree was to be planted upon the ground previously prepared for it, the tree went off by itself from the golden vessel where it stood, and ascended into the sky as high as eighty cubits from the ground, and it produced rays of light of different colours, which gave light as far as the heaven called *Bráhmálóca* ; and in this manner the tree stood in the sky until sunset. Amongst the men who had received this miracle, a thousand souls were converted, became BUDHU priests, and obtained the state of *Ráhat*, or the power of performing miracles of appearing in the air and passing invisibly from place to place. Soon after sunset, the holy tree descended from the sky and set itself upon the ground prepared for it in the orchard *Mahámée-únah*, and in the reign of DHARMASÓCA the Eighteenth. On this occasion the earth swelled up and roared, and there appeared many other miracles also. Afterwards five branches of this holy tree produced five fruits ; when they had fallen down, they were planted and moistened with the consecrated water called *Pirit-peu*. Each of these fruits produced eight sprouts, altogether forty sprouts, which were planted at forty different places and worshipped."*

In the *Rájaratnácari* we find, " Before the coming of BUDHU, and before his religion was promulgated, the island was the abode of devils ; but when his religion was preached and followed, it became the abode of men. Some BUDHUS who undertook that service, although they in person did not leave

* I am unwilling to make many extracts from works which will soon be in the hands of the public, and have in consequence selected that from the *Mahávansi* ; but in the account of the reign of king DHARMASÓCA, given in the *Rájaratnácari*, p. 115, &c., the transfer of the *Bo*-tree is detailed at greater length. It is there called the *Bo*-tree, or *Bodin Vahansé*, and *Dacshíná Srí Bodin Vahansé*, and *Srí Mahá Bodin Vahansé*, as well as *Jáyá Mahá Bodin Vahansé*.

Jambu-dwipa, yet by their power they expelled the devils from Ceylon, as the influences and rays of the sun pervade the darkest recesses ; but other BUDHU came in person to cast out the fiends, and to make the island of Ceylon a habitation for men, by depositing in consecrated places the *Dawtoo*, or bones of BUDHU, and the branch which grows in the right side of the tree called *Bogaha*, by which means the island became possessed of the most precious things, *viz.* the said *Dawtoo*, the *Bogaha* tree, and the religion of BUDHU ; and hence it follows that this island can never be governed by a king who is not of BUDHU's religion."

In the sketch of the history of Ceylon given by DAVY in his *Travels*, p. 295, but which does not give the authorities on which it rests, we find that, "in A.B. 236, DEWINEPATISSE, the fifteenth king, commenced his reign, which was remarkable for the introduction of *Budhism* ; and that DHARMAŚOKA (King of *Maddadisay*, a country to the eastward of Ceylon) sent a branch of the identical *Bo*-tree, under which SIDD'HARTA became BUDHU, in charge of eight princes and five hundred *Rahátúns*, and accompanied by eighteen different castes of people, ninety thousand blacksmiths, and a proportionate number of other artists. This branch was planted at *Anooradapoor*a in a bed eighty cubits high, where it took root, contrary to the nature of the tree, which can be propagated by seed only ; and it has lived ever since—even to this moment, it is said—always green, neither *growing* nor *decaying*."*

* The coincidence between this tradition and the actual state of the trees, none of which are of the size of a man's body, is not a little curious. The reverence in which the trees are held, and the tradition in regard to them, are also confirmed by ROBERT KNOX, who thus speaks of them :—" His (BUDHU's) great festival is in the month of March, at the new year's tide. The places where he is commemorated are two, not temples, but one a mountain and the other a tree : either to one or to the other they at this time go with their wives and children, for dignity or merit, one being esteemed equal with the other. The mountain is at the south end of the island, is called *Hammetella*, but by the Christian people 'Adam's Peak,' &c. The tree is at the north end of the king's dominions at *Annarodgburro*. This tree they say came flying over from the other coast, and there planted itself as it now stands ; under which the BUDHOU god, while on earth, used, as they say, to sit. This is now become a place of solemn worship, the due performance of which they reckon not to be a little meritorious, insomuch that they report that ninety kings have since reigned there successively ; where, by ruins which still remain, it appears that they spared not pains and labour to build temples and high monuments to the honour of this god, as if they had been born only to hew rocks and great stones, and lay them up in heaps. These kings are now happy spirits, having merited it by this their labour."—P. 161, edition of 1817.

And, finally, Captain MAHONY observes :*—" This is the tree the *Siamese* call *Prasi Maha Pout* : it is held alike sacred by them and the *Singalais*. It was against this tree that BHOODDHA leaned, when he first took upon himself his divine character. A branch of the original tree is said to have been brought to *Ceylon* in a miraculous manner, and planted at *Annooradhe-pooreh Noowereh*, where to this day a tree of that description is worshipped."

Frequent mention is made of these sacred trees throughout the three histories, from which extracts might be increased to any extent ; but I trust the foregoing will suffice to prove the striking coincidence between the information procured on the spot and that contained in these records, as well as the importance attached to the trees themselves.

2. *The Lowd-Mahá-Páya, or the Temple or Choultry of the Thousand Pillars.*

At a few paces to the eastward of the enclosure which contains the *Bogahas*, are the ruins of the Thousand Pillars.† These ruins consisted originally of sixteen hundred pillars, disposed in a square, having forty on each side and in each row, and all nearly equi-distant from each other. The greater part of these pillars are still standing : they consist, with few exceptions, of a single piece of gneiss in the rough state in which it was quarried, are from ten to twelve feet above ground, twelve inches by eight square, and about four feet from each other. The pillars at each angle, and the two in the centre of the outer line, differ from the rest in being of hard blue granite, and in having been more carefully finished. I was subsequently informed by Captain FORBES, of the 78th regiment, that those of the square which has eight on each side are rudely sculptured, and that those of the square which has seven are carved, and have grooves on their summits. The greater part of these pillars still retain the marks of the holes which were made to break them from the quarry ; and I was not a little surprised to learn from the *Múdeliár* that it was done by means of wooden pegs which were driven into the holes ; that water was then poured over them, and swelling the pegs, broke the portions between the holes, and thus severed the stone.‡ The pillars were stated to have been covered

* Vide Asiatic Researches, vol. vii. p. 45, note ††.

† See Plate, No. 16.

‡ The same process is followed in Aberdeen, and was brought into practice, I believe, within the last thirty years.

with *chunam*, and thus to have been converted into columns, having definite forms and proportions.

There is a tradition that there was formerly, on the centre of this square, a brazen chamber, which contained a relic held in much veneration; but that the relic had been removed and the chamber destroyed during a period of persecution. It was only in connexion with this tradition that the natives appeared to us to attach any importance to the spot.

At a few paces from the pillars, in a space which was kept carefully cleared, was a single pillar of gneiss in the same rough state, which was from fourteen to sixteen feet high; and on the ground near it, there was a figure of a bull in a recumbent posture, similar to those usually seen on the pagodas and temples on the opposite coast. This figure was of hard blue granite, between five and six feet in length, and was said to be a *fac-simile* of one buried in the nearest *dagoba*, built by king DOTÚGÓMENIRÁJÁ.

In reference to these ruins, we find, in the *Rájavali*, that, "The king GOMANY RAJAH extirpated the religion imported into Ceylon by his enemies; he caused to be built the *daggoba Mirisarwitz*; he caused pillars of stone to be cut and placed in forty rows, forty pillars in each row; he caused the above pillars to be covered with copper, and also to be brought through the air from *Jambudivipa*, the *dawtoo* of BUDHU." We also find, in the *Rájaratndcari*, that "he (DOTÚGÓMENI) also rebuilt the temple called *Lowaw-mahá-Pawya*, and embellished the same with ornaments of gold and silver and pearls. It being founded upon forty times forty pillars, there were raised upon the same nine storehouses, and he deposited therein much riches."

In the *Mahávansi*, also, it is stated that the same king was destined "to build a house of nine stories high, for the sanctification of the priests, by the denomination of *Lowaw-mahá-pawya*;" and that he, in consequence, desired the priests to send some *ráhatúns* into the divine world to provide him with a pattern of the divine palace. "Upon this application, they commissioned eight *rahatoons*, who proceeded to the divine world called *Tootisa Dewa Loka*, where they saw the palace of the goddess called BEERANY. So the *rahatoons* took a copy of this palace and delivered it to the king, who being exceedingly pleased, caused a building to be erected according to that copy."

Frequent mention is made of the *Lowá-Mahá-Páya* throughout the three histories, from which I shall not make further extracts, but add a few remarks upon the similarity which exists between these Thousand Pillars

and those which form part of some of the most important *Hindú* temples on the opposite coast, which I visited at a subsequent period.

The temples of *Rámiseram*, *Madura*, and *Seringam*, have each their Thousand Pillars. In *Rámiseram* the pillars are arranged in colonnades of several parallel rows, and these colonnades are separated by tanks or spaces occupied by buildings. Some of these pillars are of granite, most elaborately carved; others consist of a rough stone, which is covered with *chunam*. In *Madura* the pillars are disposed in a square of lines, radiating in such manner, that a person placed in the centre can see through in every direction. This square is raised on a platform about four feet high; the pillars are about eight feet in height, are of granite, and are carved in a very simple manner. At *Seringam* the pillars also form a square; and, at the time I was there, preparations were making for a great festival, during which the idol was to be placed in the centre of this square.

In *Rámiseram* and *Seringam*, the temples in which the idols are kept are surmounted by domes covered with copper.

In the whole of these temples, as well as in many others, the entrances are through lofty gateways or pyramidal buildings of many stories in height.

The coincidences which are thus found to exist between the description and remains of the *Lowá-mahá-páya* and these temples; the circumstance of the model on which it was constructed being derived from the palace of the goddess BHAVANI, and thus not of native origin; and the fact of its being the only one of the kind in the island, coupled with its striking dissimilarity to the general character of the *Baudd'ha* temples, afford fair ground to believe that the *Lowá-mahá-páya* is rather of *Hindú* than of *Baudd'ha* origin.

3. The Dagobas or Mounds.*

The remaining objects which were mentioned as being still held in reverence are seven *Dagobas*. They are of different dimensions, and some

* The *dagobas* are described by Mr. HARRINGTON (As. Res. vol. VI. p. 450) as consisting of a mound of earth inside, and an outside covering of no great thickness of brick. This is probably the case, with the addition that there is usually a hollow space in the inside in which the relics are placed.

of great height and extent; but, with the exception of one, in such a state of decay as to retain few traces of their original form. That which was pointed out to me as the most ancient, consists solely of a low mound of earth surrounded by jungle, and having two or three steps and a few fragments of rough granite pillars lying near it. I neglected to make any sketch of it, or indeed any memorandum of its name on which I can place reliance, but am under the impression that the name *Tapá Ráma*, which I found among my memoranda, belongs to it.

The remaining six may be divided into two classes, *viz.* those of moderate height, and having rows of pillars around them; and those of considerable height, surrounded by granite platforms of great extent. Of the first class I have selected the most perfect as a specimen.* In its present state it is modern, or nearly so, having been repaired about seventy years ago by a powerful chieftain who resided in the neighbourhood. The sketch was taken from the spot which offered least difficulty, as the weather was oppressively hot and I was much hurried; it will however serve to convey some idea of its general character. The entrance is on the opposite side. The *dagoba*, is surrounded by a platform paved with granite, and the pillars are disposed in rows around the *dagoba*; several are broken, others have fallen, but many are still standing entire. The name which we were given for this *dagoba* is *Lanca-ráma*.

The other, which belongs to this class, is said to have been built by king DEWANI PATISSE, and to have been originally twenty-five cubits of twenty-seven inches each, or about fifty-seven feet, in height.† It is much dilapidated, and the top appears to have been removed by force. It is placed in the centre of a platform, which is raised about twelve feet from the ground, and which is paved with granite. The pillars surrounding it are very elegant, and appear to have been placed in three parallel rings or rows, one about two feet from the *dagoba*, the others about ten feet from each other.

* See Plate, No. 18.

† There are two measures which have been translated cubits; the one a *rian*, which, according to ROBERT KNOX, is from the bone on the inside of the elbow to the top of the fourth finger; the other, or *waddow rian*, is the carpenter's rule, said to measure twenty-seven inches: it is as much as will reach from one elbow to the other, the thumbs touching one-another at the tops, and stretching out both elbows. The ordinary cubit I always heard estimated at fourteen inches: it is probably the half of the other, as I found that to be the case with such as I measured.

A considerable number, exceeding one hundred, still remain standing, some partially broken, others without capitals.* Among those which had fallen, one was fortunately perfect, and thus enabled me to take its dimensions with accuracy. The column or shaft is of a single piece of hard blue granite, and is twenty-three feet six inches in length. The first nine feet from the base are square, having one foot on each side; the edges of the remaining fourteen feet six inches are then cut off in such a manner as to form an octagon, having four sides each about eight inches in width, and the other four between two and three. The shaft is surmounted by a capital, which is two feet six inches in height, is octagonal, and slopes gradually outwards, so as to extend considerably beyond the shaft. The capital is divided into portions, on one of which grotesque human figures are sculptured, and terminates in a slope to the top, which is surmounted by a knob: thus shewing that these pillars were intended solely for ornament, and not to bear any weight.† I made an outline of one of them, which will give some idea of their elegance and peculiarity of form.‡

The tradition relating to these pillars is, that they were brought by giants from a distance to the eastward; and I subsequently met with some of inferior workmanship, which were lying on the ground neglected, and were said to have been thrown away by the giants, on hearing that the temple for which they were destined was completed.§

Of the four *dagobas* which constitute the second class, I have selected that

* According to a calculation which I made, there were originally in the inner circle about forty-four; in the central one, fifty-five; and in the largest, sixty-six; or, altogether, about a hundred and sixty-six of these pillars, of which a hundred and forty are still standing.

† The capitals varied considerably; some were narrower, and the ornament different.

‡ See Plate, No. 17.

§ It is remarked by KNOX, and was admitted by those of whom I made inquiry, that the natives of Ceylon were formerly, and are at present, utterly incapable of executing such work as these sculptures in granite. I was informed that the *Hindús* are employed whenever such work is required; and was shewn an enclosure of granite in progress destined for a *Bo-tree*, which was extremely well cut into bold and simple mouldings, and on which some *Hindús* had been recently employed. I found, subsequently, at *Rámiseram* and elsewhere, that the art is not lost, and that pillars of granite curiously cut are still occasionally made, are very costly, and are estimated, as donations or offerings, in proportion to the expense of time and labour bestowed upon them. I met with some curious instances both in *Rámiseram* and *Madura*, where several human figures of considerable size, as well as horses, formed parts of the pedestals of columns recently erected.

called *Játa-wána-ráma*, as retaining most of its original form,* and as best calculated to convey an idea, both of the character of these stupendous works and of the scenery by which they are surrounded. It is situated in the midst of jungle, through which a winding footpath, little frequented, is the only approach, and is so removed from the haunts of man as to impress one with a feeling of solitude not unmixed with awe. *Játa-wána-ráma* is said to have been built by king MAHÁ SINHA: it is much overgrown, but is surmounted by a building of brick, which is still in such a state as to show that it was beautifully finished. The platform is raised several feet, and is very extensive, but, like the *dagoba* itself, much overgrown with underwood. On each side of the steps to the platform are rude pillars of gneiss, and two slabs of granite, on each of which is a grotesque human figure, of which I made outlines.† Whilst thus employed, the priest informed me that I must not point the finger at one of them or I should get a fever. The other he described as a good spirit, or rather, a jolly fellow. This *dagoba* we were told is a hundred and eighty cubits in height, but this is an exaggeration: it is certainly the most lofty, and probably a hundred and sixty cubits, as stated in the *Mahāvansi*.‡ That which retains least traces of its original form is called *Mere Avaté*. It is merely a conical mound of earth of great height, and overgrown with coarse grass. Its platform is nearly on a level with the ground, consisting of blocks of granite beautifully fitted, and a portion of it is very perfect. A rough building in front, which is partly frame, partly brick, leads to an altar. In front of this building, to the right and left of the steps, are slabs of granite, having upon them rude and grotesque representations of a man, with something like a foolscap on his head, and apparently dancing in high glee. Its height was said to be fifty cubits; but in the *Mahāvansi*, the height is stated as being eighty cubits, or a hundred and eighty-six feet, which I should think nearer the truth.

Bayagiri Vihāra § is said to have been built by king BĀÁTEA. It is much overgrown with underwood, but the brick-work is occasionally apparent. It is surmounted by the remains of a brick building, which is finished with a

* See Plate, No. 19.

† See Plate, No. 17.

‡ In a survey recently made by Lieutenant SKINNER, it is ascertained to be two hundred and sixty-nine feet in height.

§ *Abhayāgiri dagoba*, deprived of its spire and pinnacle, is made by Lieutenant SKINNER two hundred and thirty feet in height.

degree of closeness and accuracy of workmanship not easy to surpass. This building was probably two-thirds higher, and carried up to a point such as usually surmounts *dagobas* of modern construction. A frame building leads to an altar, which did not appear to be much frequented. We were told that this *dagoba* is a hundred and sixty cubits in height, but this must be an exaggeration. The last, and in its present state, the most splendid of the *dagobas*, is one of whose name the memorandum which I made was so effaced that I cannot place complete reliance upon it, but which I believe, from subsequent inquiry, to be *Ruanwelli Sai*.^{*} It is situated to the north of the sacred trees, at the end of an avenue which is kept carefully cleared, and appears to be held in much estimation. Its entrance is by a building somewhat similar in character to that of the *Bodin Vahansé*, and, in like manner, there is a second at fifty paces from it; beyond this is another space, and then a third building, and beyond the whole is the platform, out of the centre of which the *dagoba* rises. The platform is raised several feet, is beautifully constructed and paved with granite, and forms a square of a hundred and eighty paces on each side. The *dagoba* is of brick, but is so much overgrown with long grass and creeping plants, that its form is considerably impaired, and the brick-work is only visible in parts. Its base is a hundred and twenty paces in diameter, and its height is said to be a hundred and twenty cubits. We were informed that there were originally altars at the foot of the *dagoba* at each of the cardinal points: but only two remain; and near that to the southward, the colossal statue of the king by whom the temple was built has fallen prostrate, and lies neglected on the ground. I was subsequently informed by Captain FORBES, that the face of the platform, which was hid by creeping plants, and thus escaped my observation, is cut into spirited representations of the fore-quarters of elephants, supposed to be the supporters of this stupendous mass.[†]

Opposite to the entrance of this *dagoba* is a large slab of granite, which marks the spot where King DEWANI PATISSE sat whilst the *dagoba* was building; and near it is a groupe of granite pillars, resembling in their general character the one previously described. At some distance from these pillars, and in the midst of the jungle, is a very large trough of granite,

^{*} This conclusion is confirmed by Lieutenant SKINNER, who, in an account of a survey made by him of *Anarājapura*, mentions *Ruanwelli Dagoba*, and states that its height, as measured, was one hundred and eighty-nine feet.

[†] In the excavated temples at Ellora similar sculptures are found.

which I did not visit, and which is stated to have been used for watering the elephants belonging to the temple. Near the *dagoba*, built by king BÁÁTEA, there was a large vessel of grey close-grained granite, three feet in depth, five feet ten inches in width, and nine feet six inches in length, equal in beauty of finish to any thing of the kind in the Vatican ; its only ornament consisted of pilasters, becoming narrower towards their bases and surmounted by a broad capital with slight mouldings, much resembling the Grecian style. It was intended to hold hot rice for the pilgrims. Whilst occupied at this *dagoba*, a rustling in the wood attracted my attention, when I saw an alligator of considerable size, which had been disturbed, and was hurrying into a deep hole in a pool of water ; he made a plunge, disappeared totally, and the weeds and leaves on the surface quietly closed, leaving no trace of him. He appeared like the spirit of desolation and decay.

Frequent mention is made of these *dagobas* in the three histories, from which I shall make a few extracts :

In the *Rájaratndcari* it is stated, that BUDD'HA sat down and preached at the place called *Tapá Ráma*, and *Tapá Ráma* is mentioned as one of eight places consecrated by former BUDD'HAS having sat down upon them. In the *Rájavali*, DEWANI PATISSE is mentioned as "having also caused the right jaw of BUDHU to be brought from the heavenly world *Sacraia Chawúna*, and built upon the same a *daggoba*, which was called *Tupa Rama* ;" and in the *Mahávansi*, it is stated that "seven days after the death of BUDHU, the *dawtoo* was placed in a magnificent temple made for that purpose, as will appear in the history called *Toopaw rama Carwtawa*."

Of *Lanca Ráma* I have not been able to find any notice, neither have I succeeded in tracing any reference to the second *dagoba*, which is of a similar character, on which I can place reliance. With reference to *Merisa-wette*, I find in the *Mahávansi*, that king DOTÚGÓMENI caused to be built the temple *Merisa wette Miharaya* ; and in the *Rájavali*, that king CAWANTISSA was succeeded by his son DOTÚGÓMENIRÁJÁ. "In his reign it came to pass that the holy and beautiful city of *Anaradhe Pura Nuwara* was filled with filth and corruption, the beautiful monument was razed to the ground, and the sacred spot filled with excrements and filthiness. The holy temples were not only broken down, but also made into seats of defilement ; the images of BUDHU were utterly destroyed, and the wicked ravagers were like no other than ravenous brute beasts. When they met the princes, they spat upon their garments ; their vessels they snatched from them and broke into

pieces ; and certain it is that those who committed such abominations will hereafter transmigrate into brute beasts. The king DOOTOOGAMENY, hearing of all these outrages committed by the *Malabars*, determined on revenge ; took ten powerful giants into his service, put their king, ELLALA, to death, took their country, brought the whole Island of Ceylon under one banner, and promoted the religion of BUDHU by building ninety-nine great temples, and among the rest, the monument called *Mirisa wette Viharé*, and there deposited infinite riches."

In reference to *Bayagiri*, we find, in the *Rājaratnācari*, p. 41, that, "The king (WALAGAMBAW), moreover, caused to be broken down a temple which belonged to a heathen priest called GIRE, and on the said place caused to be built twelve temples to BUDHU, one joining another, and in the midst caused to be raised an immense *wēharé*, or monument ; and joining his own name, ABAYA, with the name of the heathen priest called GIRE, called the said monument by the said name, ABAYA GIRE, and made an offering of the same to the priest TISSA, who had befriended him in his exile."

Of *Jāta Wāna Rāma*, which is attributed to MAHĀ SINHA, I do not find any express mention,* but the following statement relates to that king :

"MAHA SIN RAJAH was the next king ; he, causing the devils to work, made the lake called *Minery Weiva*, and dammed up the river *Caraw ganga*, which used to run to the said place ; *Minners*, at a signal given him by the gods, dammed up the brook *Tala wattuya*, and with the water of the same, cultivated twenty thousand fields, and prepared the same for sowing.".....

"And as there was no *Dharwtoo* of BOODHOO, and as he knew by hearing that the girdle of BOODHOO was in heaven, he looked up to heaven ; and the gods seeing that he gave himself so much trouble, consented to let down the girdle of BOODHOO. The king stretched out his hand to receive the said girdle, and thereupon the gods pulled it up again ; and the king stretching himself to get hold of it, the gods pulled it higher up still ; and the king, still eager to lay hold of the girdle, stretched himself still more to lay hold of the same, but still the same was drawn up out of his reach. The king, after all his anxiety, being disappointed, began to get angry, and taking his sword, sprung up eighty cubits towards heaven and cut a piece

* In the chronology recently published by Mr. TURNOUR in the Ceylon Almanac for 1833, MAHĀ SINHA is expressly mentioned as having erected *Jāta-Wāna-Rāma Vihāra* and *dagoba*, a hundred and forty cubits high, &c.

of the said girdle, which piece he kept, but the rest the gods pulled up to heaven. The king made an offering to the said piece of BOODHOO's girdle, he also made a *dagob* for the same, forty cubits in height; and having reigned twenty-four years, he died and went to heaven. And thus, from the king WIGEYA RAJAH, there were sixty-three kings, all of untainted royal blood: and at this time, BOODHOO had been dead eight hundred and forty-four years nine months and twenty-five days. But know this, that with MAHASIN RAJAH ended the royal unadulterated blood. The kings who followed were of mixed blood; and because there were no longer to be found the *Rahatoonancies* who could fly to heaven when they pleased, and because the god SACRA DEWAINdra left off to regard Ceylon, and because piety had disappeared, and because the city of *Anarawdapoor*a was left in ruins, and because the fertility of the land was decreased, the kings who followed are no longer of such consequence as before." *Rājavali*, p. 237.

The last of the *dagobas* remains to be noticed; but although I feel fully convinced that it is *Ruanwelli Sai*, the circumstance of my memoranda having been effaced, prevents my being certain; I shall therefore refrain from making any remark under this conviction, or from entering into the grounds upon which it is founded, but confine myself to a few extracts, to show the ceremonial attending the construction and dedication of these buildings and their nature and object. A very detailed account* of the building and dedication (if I may employ the term) of *Ruanwelli Sai*, is given in the *Mahāvansi*; (by which it appears "that it had been predicted that the great son of DEWAINey PATISSE should build a *dagobah* of a hundred and twenty cubits under that name.") That the king went in great pomp to mark out the ground, which was done by the priest; and that the king then laid the foundation. "He placed eight golden and eight silver vessels, with many other full vessels surrounding the same; he caused to be placed there eight bricks made of gold, surrounding each with a quantity of bricks made of silver, and the solitary man SUPPRATESTA CAMOONA laid a heap of perfumes on the solemn brick, when the chief priest SOOMANA solemnized the offering of flowers, and instantly it came to pass that a tremor of the earth took place."† Bricks were then made by the

* In consequence of the length of the description, I have been obliged to condense it.

† The coincidence between the laying of the foundation with bricks of gold and silver, and the modern practice of depositing coins, must strike every one.

agency of the gods, and five hundred bricklayers were sent for, and were asked in what form they would build the tower ; when one younger brick-layer “ proposed to send for a golden pot full of liquid, which was done ; then he took another quantity of liquid, which he threw against that in the pot, by which a *bubble* arose, which he said was to be the form of the tower.” The building being completed, the articles which were placed within the cupola are enumerated ; they consisted of a banyan-tree, having the bottom like unto coral, the stem and leaves of gold, and adorned with precious stones, &c. “ A golden figure of BUDHU, of the size of life ; the nails, eyes, palms of the hands, soles of the feet, lips, hair, eye-brows, of precious stones, and the *single hair on the forehead* of silver.” Figures of several deities ; amongst the number, BRÁHMA SACANPATE, in attendance upon BUDD’HA ; and, finally, a series of “ images, representing how the Lord BUDHU had performed the office of *Bodypoojat* five hundred times,” &c. ; representing, in fact, all the events of BUDD’HA’s life.

When the workmanship was completed, a day was fixed on to deposit the *dátú*, and the priests were required to find the same. It is then stated that an eighth portion of *dátú* had been conveyed to *Nága Loca*, or the World of Snakes, where it was worshipped by them, and that it was predestined to be brought to *Laccadiva* to be lodged in *Ruanwelli*. A priest who had attained the quality of *Ráhat* and was appointed to fetch the *dátú*, proceeded to the World of Snakes, “ passing out through the earth as a water-fowl that dives in a river,” and appeared before the king of the Snakes. The king of the Snakes wished to keep the *dátú*, that he might offer it himself, and merit redemption from his worldly life, and might *in future* obtain the *happiness of Nirvána* ; but although his nephew swallowed the box which contained the relics, the priest took them from within him with an invisible hand and returned to *Purdopirewana*, “ passing out through the earth so speedily that a flame of fire set under a spider’s web would not have consumed it so quickly.” The placing of the *dátú* in the temple, which is the next ceremonial, is attended with much pomp and accompanied by many miracles :—“ The boxes of relics borne by the king upon his head ascend up to heaven seven degrees, and are transformed into the natural shape of BUDHU eighteen cubits in stature, brightening with six different coloured rays.” Now, the representation of BUDD’HA, after having displayed many miraculous appearances, &c., at length vanished, and the relics returning of themselves into the box, descended upon the king’s head. “ Then the king wished

within himself as follows: ‘ If these relics are destined to last five thousand years unmolested by any body, and to be serviceable to all men, may it be apparent by the relics becoming now changed into the representation of BUDHU, and lying down upon this seat after the manner that BUDHU,* on the occasion of his death, did lie down between two sall trees,† placing his head towards the northern sall tree, his feet towards the southern sall tree, his back towards the east, and his face towards the west;’ and so saying, he placed the same upon the seat. The relics, according to the king’s wish, immediately assumed the representation of BUDD’HA, and laid down upon the seat, brightening the whole world, and pleasing all who saw the same; and thus the lodging of the relics in the *dagoba* took place,” &c.

“ On this occasion the earth quaked with such a tremendous noise, as if a great number of metal basins had been beaten with an iron pestle; the rock *Mahamera* bowed down as with obeisance; the seven rocks *Sapta Koola* quaked and crushed each other; the seven great tanks were furnished with five sorts of tank flowers; the sea was made as sweet as a vessel full of buffalo-milk mixed with sugar; the *dewatas* and *brahmáns* of the heavens

* This is one of the two positions in which BUDD’HA is supposed to be represented, and is that most held in reverence. At the great temple of *Dambúl*, which is described by DAVY, p. 466, the colossal figure of BUDD’HA is in this recumbent posture; the head resting on the right hand, the left arm extended down the side. The expression of the countenance of this statue is mild and benignant, the features handsome, and bearing a striking resemblance to those of NAPOLEON. On making some remark to the *Múdeliár* on the position of BUDD’HA, he said, “ It is the position in which he laid himself down calmly and composedly to die.” The other position in which BUDD’HA is represented is sitting with his legs doubled, and in many cases with the *cobra de capella* over his head. This position evidently represents his state of being when on earth, before he had “ redeemed the living beings from all their miseries.” But I was informed that many of these figures do not represent BUDD’HA, but *Pase-Budd’has*, or good men, who had attained the state of *Nirvána*, as is confirmed by the following passage from ROBERT KNOX—“ In them (the pagodas) are idols and images most monstrous to behold, some of silver, some of brass and other metals; and also painted sticks and targets, and most kinds of arms, as bills, arrows, spears, and swords. But these arms are not in BUDDOU’S temples, he being for peace; therefore there are in his temples only images of men cross-legged with yellow coats, or, like the *Gonni* priests, their hair frizzled, and their hands before them like women, and these they say are the *spirits of holy men departed*. (P. 144, 5.) As for these images, they say, they do not own them to be gods themselves, but only figures representing their gods to their memories, and as such, they give to them honour and worship.”

† *Sála*, or jack-tree? *Artocarpus integrifolia*.

gave an exclamation of honour, the sky produced lightnings and untimely rain, and the whole thousand *Sackwalas* at once became agitated."

I did not ascertain whether any religious ceremony is performed at the present day at any of these *dagobas* further than occasional offerings of flowers at their altars. From the appearance of most of them, and the manner in which they are overgrown by jungle, I should imagine that they are little frequented, with the exception of that which I believe to be *Ruanwelli Sai*. Several kings are spoken of as having worshipped the cupola *Ruanwelli*; and king BHATIE is mentioned in the *Mahavānsi*, p. 222, as "having gone to worship the cupola, where he, hearing that *rahatoons* preached the doctrines of BUDHU withinside the cupola, laid himself down on the floor, vowing not to stir out without seeing the inside of the cupola." "Having accomplished his wish, he covered the cupola from top to bottom with silken stuffs, &c.; and having prepared flowers, he caused sandal-wood to be taken from the royal stores, and anointed the cupola all over with a pappy substance four inches thick, and afterwards washed the same with a water-engine from the tank *Tisano*."* Another king is mentioned as having "ornamented the steeple of *Ruanwelly* with a net strung with diamonds, with an excellent umbrella over it." Another king is stated "to have laid himself down at the hall of *Ruanwelly* at a time of great scarcity and famine, vowing that he would not stir from thence until floated up by a heavy shower of rain; when it rained so that the king was floated up, and his ministers were obliged to come to his assistance." Other kings are spoken of as having covered the cupola with white cloth, with umbrellas, and with *chunam* made from pearls; in fact, the whole of the histories abound with evidence of the importance attached to these buildings, and of the reverence in which they were held. The acts of a king's reign, which are dwelt upon as more

* The same circumstance is mentioned in the *Rājaratnācari*, with some slight difference. Among the contents of the cupola, a figure of BUDD'HA, *twelve cubits in height*, is mentioned, which coincides with that which I was told was placed under the *dagoba*, which I believe to be *Ruanwelli*. And the lake with whose waters the king washed the *dagoba*, is called *Tissa-wivewa*—the *Tissa-wava* to the south of the temple. These coincidences, although they amount to conviction which is conclusive to my mind, do not amount to certainty, and therefore do not warrant my stating that the two are identical, a circumstance which I regret, as *Ruanwelli Dagoba* is the most important of the whole, and is that most frequently mentioned in the histories.

peculiarly deserving of praise, are the construction of tanks and the building and repair of *dagobas*. The number of *dagobas* which are recorded as having been built at different periods is very great; a very considerable number are still to be found in every part of the island: they vary much in size, and somewhat in form. Few approaching in magnitude to those at *Anarádhepura* are to be found in other parts of the island, but small *dagobas* are very common. The *dagobas* of intermediate size, which constitute part of the *Baudd'ha* temples almost without exception, have occasionally a form approaching very nearly to that of a bubble, as described in the building of *Ruanwelli*; but in general, and particularly when small, they have the form of a bell, and are not without elegance and beauty: they are in many cases monuments of kings. A sketch,* for which I am indebted to a friend, of the tombs of the kings and queens of Candy, will convey some idea of their character.

The most important of these temples have been described as containing *dátús*, or relics of BUDD'HA, with images and offerings in gold, silver, and precious stones: but no attempts have been made to ascertain their present contents. It appears from DAVY, p. 221 (note), that one, whose dimensions are not stated, was opened by Mr. LAYARD, and the result of the examination was as follows: "In the middle of the ruined *dagoba*, a small square compartment was discovered, lined with brick, paved with coral, and containing in the centre a small cylindrical mass of grey granite, covered exactly with a rounded cap of the same stone; several small clay images of the hooded snake; a common earthen lamp, similar to that used by the natives at present; and a small obelisk, or four-sided truncated pyramid, solid and composed of cement. The top of the vase, or *caranduah*, was solid; the vase itself hollow: it contained small fragments of bone; bits of thin plate gold, in which the bone was probably wrapped; some small gold rings; two or three small pearls, retaining their lustre completely; beads of rock crystal and cornelian; small fragments of ruby, blue sapphire, and zircon, and pieces of glass in the shape of icicles, which were crystalline and opaque."

Mr. LAYARD gave me a small *dagoba* (about an inch in diameter), made of clay, having an inscription on its base, which was found with a great many

* See Plate, No. 21.

others in a *dagoba* opened by his orders ; but I have no means of ascertaining whether the *dagobas* opened by him were temples or tombs.*

After having accompanied me to the several places enumerated, the priests conducted me through jungle to a spot, not far distant from the *dagoba*, which I believe to be *Ruanwelli Sai*. I there found two or three stones laid flat on the ground, in such manner as to form a kind of arch enclosing a small hole, which would not admit the hand of a man. The stones were grooved with slight mouldings, and the hole itself appeared as if much used by reptiles or snakes passing in and out. The priests informed me with much seriousness, and the appearance of great veneration, that this hole led to the " hall of the *cobra capeels*,† which was situated at some distance." I neglected to make any further memorandum on this subject ; but it is not the least curious coincidence that I find in the description of the building and dedication of *Ruanwelli*, as before given, that the young priest SONUTTERA proceeded to the snakes' world *Manjereca* to procure an eighth portion of *dátú*, that it might be deposited in *Ruanwelli dagoba*; that he accomplished his object, and returned to *Purdopirewana*.

* According to ROBERT KNOX : " The poorer kind, who regard not whether worms and maggots eat the dead, carry the body wrapped in a mat into the woods, and, with two or three attending, lay it in a hole without any ceremony, and cover it ; but the better sort burn their dead, and that with ceremony. They wash the body, cover it with a white cloth, and place it in a hollowed tree, until the king's orders are received : the body is then laid upon a bedstead (which is a great honour among them), and with the bedstead carried on men's shoulders to some eminent place in the fields or highways ; there they lay it upon a pile of wood some two or three feet high ; then they pile up more wood upon the corpse lying on the bedstead or in the trough : over all, they have a kind of canopy built ; if he be a person of very high quality, covered at top, hung about with painted cloths and bunches of coco-nuts and green boughs, and so put fire to it. After all is burnt to ashes, they sweep together the ashes into the manner of a *sugar loaf*, and hedge the place round from wild beasts breaking in, and they will sow herbs there. Thus I saw the king's uncle, the chief *tirinax*, who was as it were the chief primate of all the nation, burned upon a high place, that the blaze might be seen a great way."

KNOX does not mention the ceremonial of the burial of the kings, but I have met with an account, that after the body is burnt, the bones are collected and formed into a shape resembling BUDDHA ; after which they are deposited in the *dagoba*.

During our ramble, we stumbled upon one of the places of sepulture mentioned by KNOX. It consisted of a mound of earth, on the top of which, ashes were sprinkled, and above the ashes were suspended pieces of string with several bits of white rag attached to them. The whole was enclosed by a rude fence, and the area kept free from weeds.

† It was thus pronounced by the priests.

It is not my object, nor indeed am I qualified, to enter into the question how far *Budd'hism*, as at present existing in Ceylon, is mixed up with the Hindú religion, and with the worship of demons and snakes. From the situation of *Anarúdhepura*, and the constant inroads of the *Hindús*, the introduction of some of the practices and observances of their religion is naturally to be expected, and may I think be traced; it also appears equally probable, that the worship which is still paid to demons or devils, and the respect in which the *cobra de capella* is held, are either remains of the original superstition of the island which it was the object of BUDD'HA to destroy, or are connected, as in the present instance, with his triumphs over that religion. One of the first acts of BUDD'HA on his arrival in *Laccadiva* was to drive the devils to the sea shore, from whence they were banished; and in his fifth year, he is stated to have come to the residence of the snakes, where, appearing in the sky, he delivered a sermon to them, by which he appeased them, and brought thousands to a pious life, &c. In the *Mahāvansi*, p. 59, there is a very curious account of king DHARMASÓCA having procured the blessing of seeing the person of BUDD'HA two hundred and twenty-one years after his death, by means of the *cobra-de-capella* MAHÁ-CÁLA, who acknowledges the superiority of BUDD'HA in the following words: "I am endowed with passions, but BUDHU is without passions; I am with blemish, but he is without blemish; I am fallible, but he is infallible; I am with lust, he is without lust; I am with pride, he is without pride; I am sinful, he is virtuous. On that account, neither I nor MAHÁ BRÁHMA, who has the power of giving light to ten thousand worlds at once, by holding forth his ten fingers, should be able to represent the form of BUDHU, unless, however, it be not offensive to the character of BUDHU." Frequent mention is made of the snakes in the early part of the three histories, all of which concur in representing them as dissenting from, and opposed to, the religion of BUDD'HA, and record his efforts to convert them from their errors.

Although this paper has already been carried to considerable length, I cannot refrain from adding the following remarks on the semi-circular stone at the inner entrance of the temple of the *Bodin vahansé*, or enclosure of the sacred trees.

It has been previously stated that one of the bands or rings is sculptured with a representation of the *Hansa*, or *Bráhmāna* duck, carrying the root of the lotus in its bill; and another, with figures of the elephant, the horse, the lion,* and the cow.

The beauty of this stone induced me to make a rough memorandum, sufficient to enable me to give some idea of it;† and as I was inclined to attribute the circumstance of the *Hansa* being introduced, to a popular tradition with which I was previously acquainted, that when BUDD'HA was engaged in the contest with the devils, he was not only weak and weary but hungry also, and that the *Bráhmāna* duck brought him the root of the lotus and ministered to his wants, I was thus led to suppose there must be some reason for the other figures. This was confirmed on finding the following passage in the *Mahāvansi*, which induced me to inquire further.

In the description of the world, it is said: "This lake is also surrounded by six other small lakes. On the four sides of the said great lake are four holes: one is formed like a lion's mouth; one like an elephant's mouth; one like a horse's mouth; and the other like a bullock's mouth. The streams which pour out of the said holes form the four large rivers which run through *Dambodiva*." I was subsequently gratified by finding the following in the *Asiatic Researches*:‡ "On the eastern bank of *Anaudat* is the image of a lion's head; on the southern, that of an elephant's head; on the western, that of a horse's; and on the northern, that of a cow's. And from these four heads are poured forth the streams of four rivers; but the banks of each of these four great rivers abound in that species of animal, from the image of whose head, its waters rush out of the lake *Anaudat*. Thus the banks of the south river abound with elephants; of the eastern, with lions; of the northern, with oxen; and of the western, with horses." And I have lately been confirmed in my supposition by finding, in the *Journal des Savans* for October 1831, p. 604, "Quatre

* I was led to expect, from finding the lion on this stone, from the frequent allusions which are made to that animal, and from the royal race claiming descent from it, that the lion was a native of Ceylon; but on inquiry I find that it is not so, and that one was sent as a present to the late King of Kandy, who was much disappointed with its size and appearance. In the *Asiatic Researches*, vol. XVI. p. 268, it is said the lion is not a native of *Ceylon* nor of *Burma*, yet it is found in the sculptures of both countries.

† See Plate, No. 17.

‡ Vol. vi. p. 231.

fleuves arrosent le continent meridional ou *Djambou-dwipa* ; a l'orient le *Ganga*, ainsi nommé d'un mot qui signifie maison céleste, parcequ'il coule d'un endroit élevé ; le *Sindhu* au midi ; le *Vats* ou *Vadj* (Oxus), a l'ouest ; et le *Sita* (froid) ou *Sihon* au nord. Ces quatre fleuves sortent d'un lac carré nomme *A-neouto-tha* (Anoudata) dont les quatre faces sont remarquables par un animal et une matière qui leur sont particuliers. L'orifice du Gange est la bouche d'un bœuf d'argent ; celui du Sind est la bouche d'un elephant d'or ; celui de l'Oxus est la bouche d'un cheval de saphir ; celui du Sihon est la geule d'un lion de *spathika* ou cristal de roche." And this is explained : " 1. To the east, the King of Men—the Emperor of China ; 2. To the south, the King of Elephants—the great Rajah of India ; 3. To the west, the King of Treasures—the King of Persia ; 4. To the north, the King of Horses—the prince of the nomades of the north, the Huns, the Scythians, the Turks, the Monguls, the Tartars." We thus trace in this distribution the four great monarchies, known to the *Hindús* : the first of these accounts is derived from a Cingalese history ;* the second is derived from Burmese records ;† and the last is derived from Chinese authorities.‡

These comprise most of the objects of interest which were pointed out to me at *Anarádhepura*. It is very probable that many escaped my observation, as I was guided by curiosity alone, and possessed no previous knowledge to direct my attention.

Mehentélé.

On quitting *Anarádhepura* we proceeded, at the recommendation of the *Múdeliár*, to *Mehentélé*, a hill temple about twelve miles to the north-east. Our course was in the first instance by the side of the splendid lake *Neura Wáva*, whose banks on the side next to the temples were planted with a species of *Acacia*, of which the sweet scented tufted flowers are

* The *Mahávansi*.

† Dr. BUCHANAN "On the Religion and Literature of the Burmans."

‡ M. ABEL RÉMUSAT, "Essai sur la Cosmographie et la Cosmogonie des Boudhistes d'après les Auteurs Chinois."

used as offerings.* This lake is very extensive, and is formed by an artificial dam, which in many parts is raised at least thirty feet, is upwards of two miles in length, and of great solidity. On descending from this extraordinary embankment, our route was through jungle; in which we saw two or three rude mud temples, and abundant traces of elephants, who appeared to be masters of the soil. We ultimately arrived at a small lake at the foot of the hill of *Mehentélé*. I have seldom seen any thing more striking: it was mid-day; the lake was stillness itself; flocks of aquatic birds rested upon its surface, indifferent to our approach, and apparently not feeling any dread of man; here and there a huge buffalo held out its nose with inquisitive curiosity, but altered not its position; in the shade was a herd of the beautifully spotted deer (the *axis*), which raised their heads and hesitated whether to move or not; splendid jungle of the largest growth bounded the lake to our left, and to our right, the hill of *Mehentélé* crowned all, and rose towering above us, in parts completely covered by the densest foliage, in others breaking out in huge masses of granite, which looked almost ready to fall into the valley beneath.

After following a jungle path up a portion of the hill, we came to a magnificent flight of steps of granite, full fifteen feet in breadth, but so low that we led our horses up. We then arrived at a path, and ultimately at several other flights of steps, containing altogether seven hundred and fifty-two steps. Near the summit, we found an inscription cut in the rock, which had been smoothed for the purpose, and faced nearly in the direction of *Anaradhepura*. We made copies of the inscription, and were subsequently informed that specimens of it are to be found in other parts of the island, but that there is no one at present living in Ceylon who understands it.†

* In the vicinity of this lake is the dwelling of a chieftain of high rank. The house is one of the very few not situated in cities which are tiled, which is a privilege confined to the highest rank. It was of a single story, and consisted of a square divided into compartments open in the centre, and having several small rooms on each side. In front of these rooms was a terrace raised two or three feet, so as to be on a level with the rooms, and protected from the sun by the roof, which was prolonged so as to form a verandah; some of the rooms were made use of as granaries. There were a great number of attendants.

† ROBERT KNOX mentions "Ancient writings engraven on rocks, which puzzle all that see them."

At the summit of the steps we passed through a porch, and were most agreeably surprised to find ourselves in a space of considerable extent, with masses of granite intermixed with fine trees rising above us nearly on all sides, and the whole over-topped by a large *dagoba* to our right.*

The area† which we had thus reached, was planted with coco-nut and other trees, under whose shade were several *dagobas* of small size. In the centre was a *dagoba* of intermediate dimensions in good repair, about twenty-seven feet in diameter, and surrounded by a stone-wall, within which were fifty-two pillars of granite. These pillars were octagonal with capitals, in their general character similar to those at *Anarádhepura*; but the pillars were only twelve feet in height, of rude workmanship, and without any elegance of form. The ornament on some of the capitals was the *Bráhma*na duck, with the lotus in its bill. To the westward, was the large *dagoba*, which is said to be a hundred and twenty cubits in height, and to be built over a hair which grew out of the forehead of BUDD'HA just above the left eye. It is surrounded by a paved terrace, and is approached by flights of steps two hundred in number, and by an inclined plane of considerable extent. The *dagoba* (its summit I presume) is stated to be a

* See Plate, No. 20:—*Mehentélé*.

† I made a sketch which will give some idea of this very curious spot. Whilst occupied in making it, I was not a little interested by observing the care with which an old man, who had taken advantage of our protection to visit the Sacred Temples, gathered the flowers of the tree under whose shade I sat. I found that he took especial care that the flowers should not touch the ground, as they would thus be defiled, and be rendered unworthy as an offering. I was informed that the tree itself is the only one of the kind in the island, and that its flowers are in consequence held in great estimation; but, independently of this cause, the flowers were very beautiful; they were of a rich yellow, and reminded me of the *Gum cistus* (possibly it is the *Maháanal*, so often mentioned as a favourite offering).

The old man above alluded to had begged leave to join us at *Chilaw*. He was a man of some importance in his way, and a doctor: we had however little reason to think very highly of his skill, as he contented himself, when called in to a cūley who, struck by the landwind, had lost the power of speech, and was strongly affected by spasmodic twitches, with simply tying a few pieces of white rag round the neck, arms, and ankles of the poor fellow, and after repeating a few words, leaving him to his fate. The parade with which his store of charms was produced (for of medicine he had none), was not a little amusing: the gravity with which he looked at each, and the earnest attention with which he was watched by those who had gathered round, formed a very peculiar, and not uninteresting scene. This poor fellow was, however, too seriously ill to be left to such treatment alone: recourse was had to laudanum, and with good effect.

thousand and twenty-six feet above the plain below, which I should think must be very near the truth.

On the eastern side of the area are the dwellings of the priests, &c.; above which a bare rock of granite rises abruptly. This rock is surmounted at its very summit, which is far from easy of access, by a heap of stones, which the piety of pilgrims had brought from a distance; thus forming a heap precisely similar in character to those met with in Scotland and in the Alps.

The *Múdeliár* had ascended a part of this mass of granite, and was so delighted with the view that he induced me to follow. It certainly did not require the association of country or of religious feeling to produce a strong impression on the mind, when thus looking down upon those, I may say, stupendous monuments, which the same morning had towered like giants over our heads. From this elevated position, I observed a great number of small *dagobas* in almost every direction, and was informed that there are no less than three hundred and sixty around this spot. On the following morning we proceeded on our route to *Dambúl* and *Kandy*, and on our way down the hill observed two large slabs of red granite placed in an erect position, with a long inscription on each. We were informed that the character was Sanscrit; but the sun was gaining power, and we had not time to attempt to copy them.

Frequent mention is made of *Mehentélé* in the three histories before mentioned, from which the following extracts will suffice: "The said MEHINDU, with the above-mentioned DEWAINÉY PATISSE, established the religion of BUDHU, possessed many precious relics, and likewise a precious stone, in which was a winding cavity running eight times round the same, which had been given by the god SAKKRAIA to the king COOSA, and had been transmitted until it fell into the hands of DARMASOCA. This king, in order to preserve the relic of BUDHU, having taken the golden hair which grew on the middle of the forehead of BUDHU, which hair had seven ringlets, he artfully wrought the same into the said precious stone, and having given the relic to his son the said MEHINDUMAU, it was by him brought to Ceylon, and deposited upon the rock called *Jacgiri Parwata*, and a monument of stone erected over the same." (*Rájaratnácari*, p. 34.) DEWANI PATISSE is also mentioned in the *Maháwansi* as having caused houses or caverns to be made in the rock called *Meentelau*, as also "with having caused the conical building to be constructed on *Meentelau*, in which BUDHU's bone, which

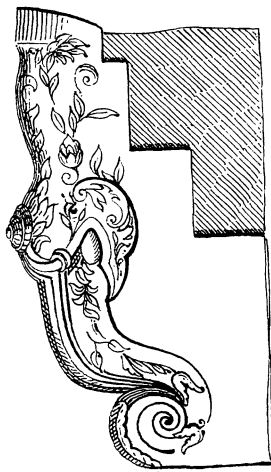


Printed by C. Hallman.

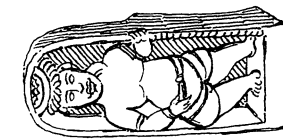
ENTRANCE TO THE GREAT TEMPLE AT ANAHAJAPURA.

Engraved for the Royal Asiatic Society by W. Maclure.

Specimens of Sculpture at Anandbhepura.



Balustrade at Entrance to Begahar.

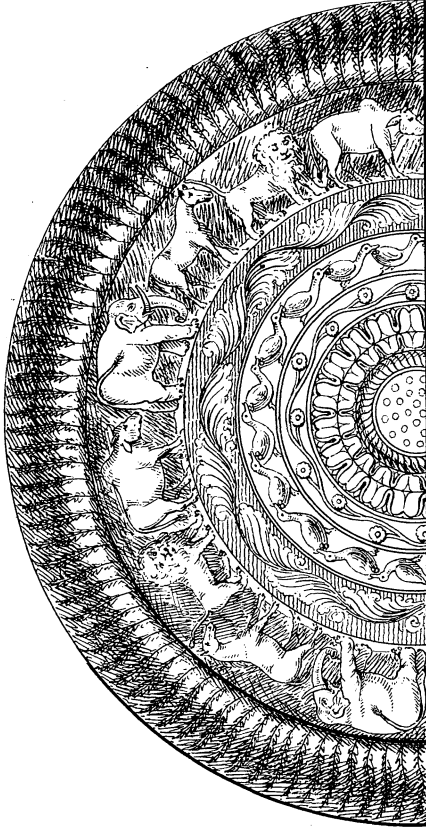


Jata Wansa Rama



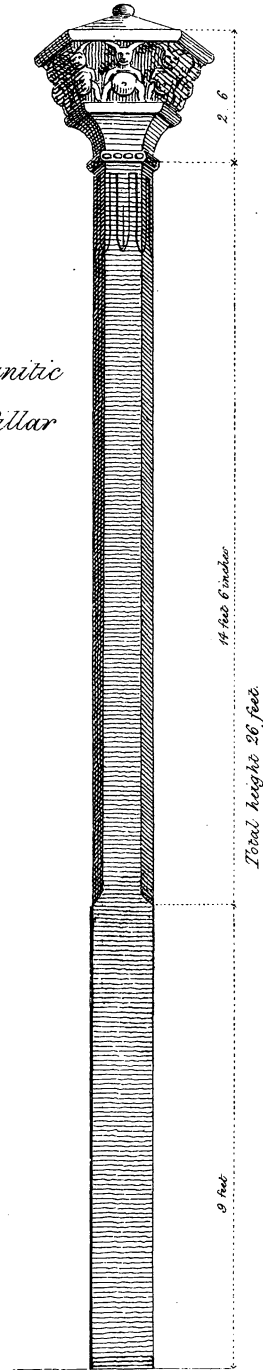
*Left Janitor.
(a good Spirit)*

Semicircular Stone at Inner Entrance to the Begahar.

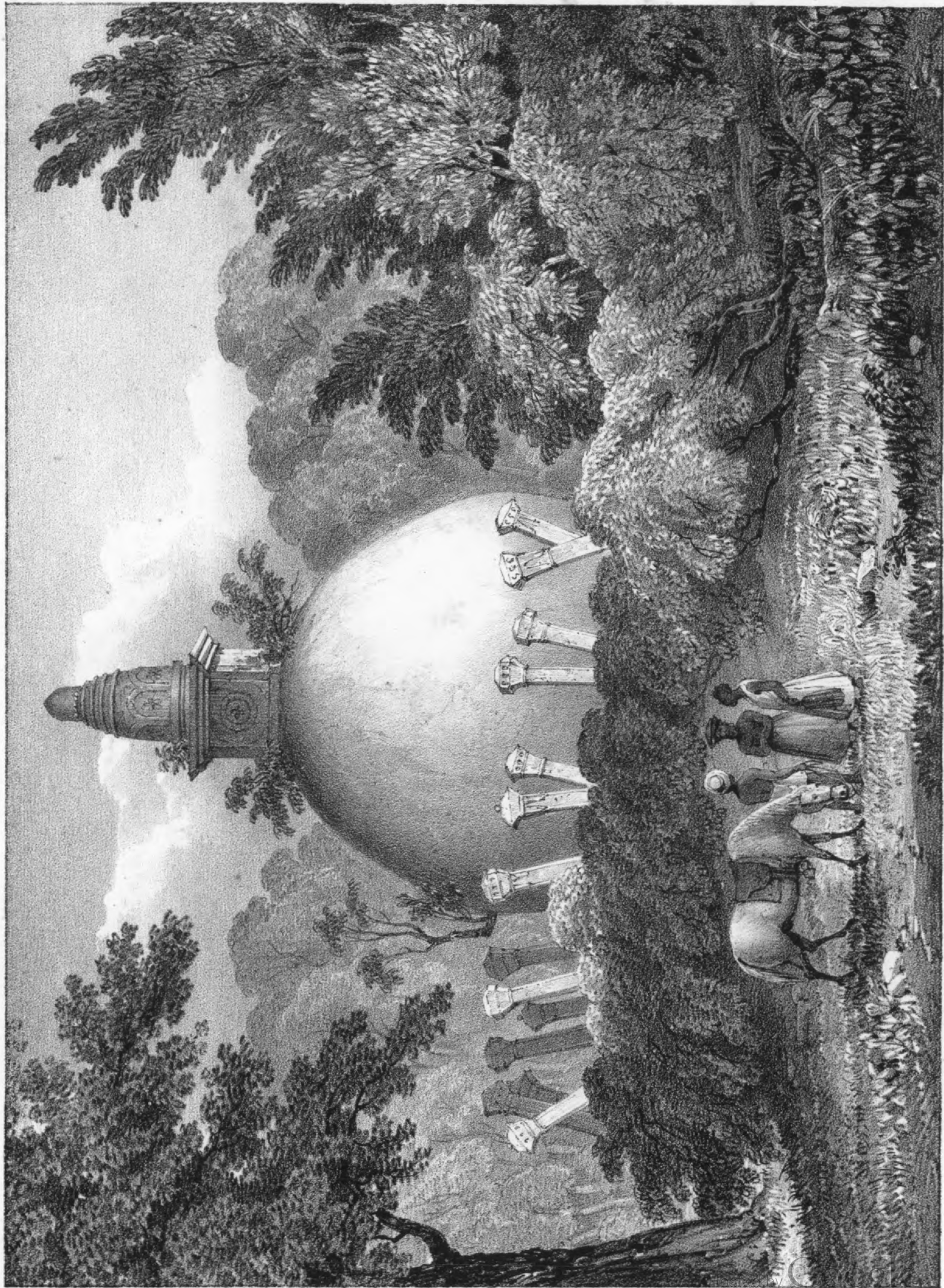


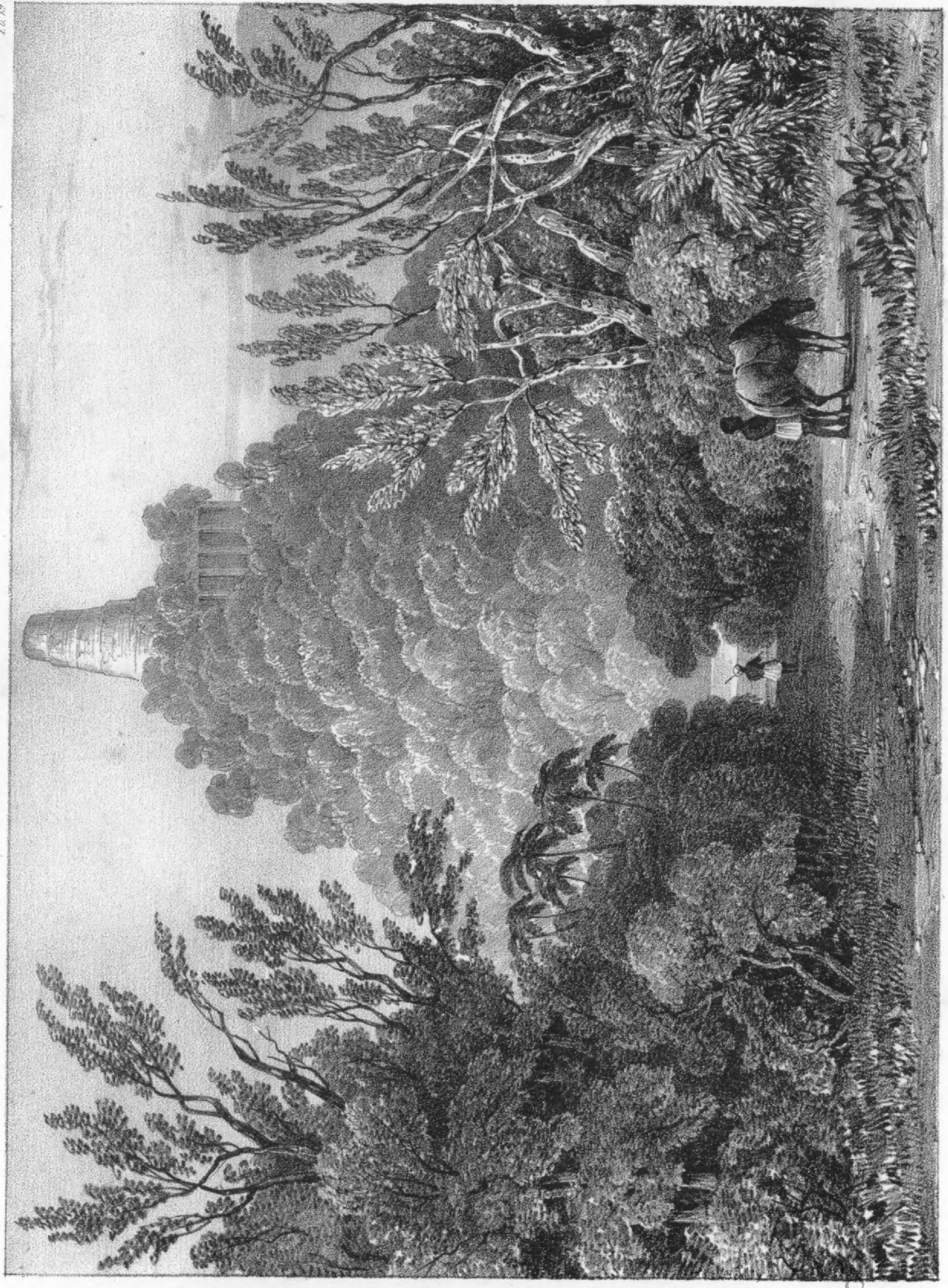
*Right Janitor.
(not to be painted etc.)*

*Granitic
Pillar*



Lithographed for the Royal Asiatic Society by C. H. H. H. H. H.







Engraved for the Royal Asiatic Society by W. Wilson

Printed by C. Edmunds.

M E H E N T E L E .

was brought by the priest SUMENA SAMENEERA, was deposited." In the *Rajavali*, p. 184, it is said, "King DEWENEY PATISSE afterwards caused caverns to be cut in the solid rock at the sacred place *Meentala*, and there he placed the higher orders of priests; he bestowed great alms upon the same, and abounded in good works."

It only remains to investigate the period of the foundation of *Anarádhepura*.

It was not until the treaty of Sir ROBERT BROWNRIGG, in March 1815, that the English had free access to the interior of Ceylon; prior to this period their dominion was confined to a narrow ring or belt which went round the island, and shut the Kandyans up within it. In consequence, nothing was known of *Anarádhepura*, except by tradition or report. In the works which have been published since the English got possession of Colombo in 1796, no mention is made of this city except incidentally, in the sketches of the history of the island, derived from native records. The only account in any English author which I have found is that by ROBERT KNOX, and the date of which is antecedent to this period. KNOX was many years captive in the Kandyan country during the dominion of the Dutch, and passed through *Anarádhepura*, when he made his escape in 1679; he thus mentions it:

"Now we set our design for *Anarodgburro*, which is the lowest place inhabited belonging to the King of Candy, where there is a watch always kept, and nearer than twelve or fourteen miles of this town as yet we had never been."—P. 316.

"To *Anarodgburro*, therefore, we came, called also *Neur Waug*, which is not so much a particular single town as a territory. It is a vast great plain, the like I never saw in all that island; in the midst whereof is a lake which may be a mile over, not natural, but made by art, as other ponds in the country, to serve them to water their corn grounds. This plain is encompassed round with woods, and small towns among them, on every side inhabited by the *Malabars*, a distinct people from the *Chingulays*."—P. 322.

"Being entered into this town, we sat ourselves down under a tree and proclaimed our wares, for we feared to rush into their yards, as we used to do at other places, lest we should scare them. The people stood amazed as soon as they saw us, being originally *Malabars*, though subjects of *Candy*, nor could they understand the *Chingulay* language in which we spoke to

them.”...“ So they brought us before the governor.”.....Here we staid three days.”...“ Now God, of his mercy, having prospered our design hitherto, for which we blessed his holy name, our next care was how to come clear off from the people of *Anarodgburro*, that they might not presently miss us, and so pursue after us; which, if they should do, there would be no escaping from them.” P. 327. “ On the twelfth day of October, on a Sunday, the moon eighteen days old, we marched forward; but the river winding about, brought us into the midst of a parcel of towns called *Tissea Wava*, before we were aware; for the country being all woods, we could not discern where there were towns, until we came within hearing of them.” ...“ We knew before that these towns were here away; but had we known that this river turned and run in among them, we should never have undertaken the enterprize.”...“ We kept travelling from morning till night still along by the river side, which turned and winded very crooked. Here and there, by the side of this river, is a world of hewn pillars standing upright, and other heaps of hewn stones, which I suppose formerly were buildings; and in three or four places are the ruins of bridges built of stone, some remains of them still standing upon stone pillars. In many places are points built into the river like wharfs, all of hewn stone, which I suppose were built for kings to sit upon for pleasure: for I cannot think they ever were employed for traffic by water, the river being so full of rocks that boats could never come up to it.”—P. 334.

There is, however, the following notice of *Anarājapura*, by the French translator of the ‘ *Histoire de l’Isle de Ceylon, écrite par le Capitaine JEAN RIBEYRO, et présentée au Roi de Portugal en 1685.*’

“ Avant que de parler des villes et forteresses de Ceylon qui subsistent présentement, il est bon de dire quelque chose des ruines d’*Amarajapure* si fameuse dans les croniques et romances des *Chingulais*. On prétend que quatre-vingt-dix roys ont fait leur demeure dans cette ville, et c’est de la même qu’elle a pris son nom. Comme nous ne connoissons point d’autres ouvrages considérables que les Romains ont laissez, on veut que les temples et palais dont on voit encore de grands restes soient de la façon de ces maîtres du monde, et qu’ils ayent été bâtis depuis l’Empereur CLAUDE. Je crois pour mois que l’on pourroit aussi bien dire que ces ouvrages sont d’ALEXANDRE LE GRAND, ou peut-être encore avec plus de raison de quelque prince plus ancien et que nous ne connoissons pas. Cette ville est dans le quartier de *Mangal corla*. Il y avoit un palais qui étoit orné de seize cens

colonnes d'un marbre très fin et d'un travail merveilleux ; un temple superbe qui contenoit trois cens soixante-six pagodes, dont il y en avoit vingt-quatre d'une grandeur extraordinaire et d'une pierre très belle et très rare. Ces trois cens soixante-six pagodes répondoient aux trois cens soixante et six jours de l'année, ce qui feroit voir que ceux qui l'ont bâtis avoient l'année solaire à peu près comme nous.* Autour de ce temple étoient des étangs qui recevoient l'eau par des aqueducs très bien bâtis, que l'on dessechoient et que l'on remplissoient d'eau selon le besoin que l'on en avoit."

In this note, or, as the author calls it, "Addition au Chapitre douzième," reference is made to the "Vie de CONSTANTIN DE SAA," page 13, as to the name being derived from ninety kings having resided at *Anarâjapura*. This description evidently includes *Mhentélé*, as well as *Anarâdhepura*; and if granite be substituted for marble, would give by no means an inaccurate idea of its present state. From the circumstance of the Portuguese having had possession of *Kandy* about this time, the particulars are probably derived from actual observation; but whether this be the case or not, the manner in which the Emperor CLAUDIUS and ALEXANDER THE GREAT are mentioned, show that the ruins had excited attention, and that a remote antiquity was assigned them. The description and drawings which I have been enabled to give of the buildings, and particularly of the pillars, are I think conclusive, that they are not either of Roman or of Grecian origin.

These are the only notices which I have been able to find of this city, with the exception that its position is laid down with tolerable precision in relation to the rest of the island, under the name of *Anurogramum regia*, in the district of the *Anurogrammi*, in the "Theatrum Geographiæ Veteris. Cl. PTOLEMAI,† ALEXANDRINI" (F. BERTIUS.)

* The number mentioned to me at *Mhentélé* was three hundred and sixty. Which of the two is correct I do not pretend to decide; but it appears from Sir WM. JONES that the lunar year of the *Hindûs* is of three hundred and sixty days only, and is a more ancient mode of reckoning than the solar year.

† It may not be uninteresting to observe here, that the position of *Anurogramum* is not only laid down by PTOLEMY with great accuracy, but that of *Dondera-head*, under the name of *Dagana civitas, sacra lunæ*, and several other places, as well as that the part marked *Pascua Elephantum*, in the south of the island, is still that in which elephants are most abundant, as was proved during my stay, by the capture, near *Bentotte*, in one *kraal*, of upwards of three hundred. The intimate knowledge which he managed to procure of this island, is further proved by his describing the men as having the hair of women. The men (on the sea-coast in particular) at the present day wear their hair long, turned up, and fixed with a large comb, such as is only worn by women in Europe.

The existence of this city being thus carried up by European authorities to a period not far short of the Christian æra, we have only to trace it in the native records.

In the *Rájaratnácari*, *Anarádhepura* is mentioned as one of the places consecrated by the visit of the first BUDD'HA,* and that it was then called *Abayapura*. It appears that PANDUWAS ABAYE caused the city of *Anarádhe* to be built, and that during his life-time the city was assigned to his uncle ANARADHE, and took the name of *Anarádhepura-newara*.

VIJÁYA, the first king of Ceylon according to two of the histories, embarked for Ceylon on the day of the death of the present BUDD'HA; according to the other, seven days after his death. VIJÁYA is stated to have reigned either thirty or thirty-eight years: he was succeeded by his minister ALPETISSA, who appears to have held the government only until the arrival of PANDUWAS. PANDUWAS reigned thirty years: he was father to ABAYA, by whom *Anarádhepura* is said to have been built. We have thus a period of from sixty-one to sixty-nine years after the death of BUDD'HA, within which the city was founded.

The date assigned to the death of BUDD'HA, by concurrent testimony of the best authorities, is 542 years before the Christian æra. If from this we deduct seventy years, within which, as before stated, we may safely believe that the city was founded, we arrive at the date of 470 years before Christ, and thus assign to this interesting spot the remote antiquity of upwards of 2,300 years.†

According to the histories, *Anarádhepura* was subject to the constant inroads of the *Malabars*, who appear always to have retained possession of the northern part of the island. Its buildings were frequently destroyed;

* The first BUDD'HA, according to Sir WM. JONES and Mr. BENTLEY (*Asiatic Researches*), is supposed to have existed about 1027 years before Christ; the antiquity, therefore, which is thus assigned to *Anarádhepura*, under the name of *Abaya-pura*, is 2860 years; but the accounts are vague and contradictory: for, on comparing them, ABAYA commenced his reign in the sixty-ninth year of BUDD'HA, or 474 years before Christ; and *Anarádhepura*, which had taken the name from *Anurádha* during the reign of the preceding king PANDUWAS, became the capital of the next king, whose reign commenced 437 years before Christ.

† From the Chronology, published in the Ceylon Almanac for 1833, which has fallen into my hands whilst correcting this paper for the press, and which has been compiled with great care by Mr. TURNOUR, the revenue commissioner at Kandy, the æra of the present or fourth BUDD'HA, is 543 years before Christ.

its temples defiled and defaced : but a party professing the faith of BUDD'HA always remained in the strongholds and fastnesses of the hill country. The records and sacred books were there preserved ; and after periods generally of short duration, their native kings came down from the mountains, resumed the empire, and restored the religion of BUDD'HA.

A succession of kings, with frequent though short interruptions, made *Anarádhepura* their capital from the time of its founder to that of MEHINDU the Third, who commenced his reign about 1,300 years after the death of BUDD'HA, and reigned forty-eight years ; and thus we find that this city was not only the chief seat of the religion of the country, but the residence of its kings during the long period of 1,300 years. After this period, the city appears to have been deserted ; but we find that PÁRACRÁMABÁHÚ caused the ruins of *Anarádhepura* to be repaired ; caused the cupola of *Ruanwelli*, of a hundred and twenty cubits in height, to be repaired completely, with three other cupolas, namely, *Abaya-giri*, of a hundred and forty cubits high ; *Játa-wána*, of a hundred and sixty cubits high ; and *Meressa-avatie*, of eighty cubits high, which had also been thrown down by the *dhamilas*, and were overgrown with wood, and frequented by wild animals, such as tigers, bears, &c. He also built *Lowá-mahá*, which is on each side a hundred cubits high, by raising up the sixteen hundred pillars of rock ; then, having restored all the ruins of *Tapá-ráma*, he repaired the sixty-four cupolas at *Myttyagiri*, &c. This king commenced his reign in the 1809th year of BUDD'HA, or four hundred and sixty-five years ago, and his having repaired these temples accounts for their present state of preservation.*

* According to Mr. TURNOUR, *Anarádhepura* ceased to be the capital in the 1312th year of BUDD'HA, and was made so again by MEHINDU, in A.B. 1566—the date assigned to PÁRACRÁMABÁHÚ is A.B. 1696, or A.D. 1153.

XXXI. *An Account of the Mission of YUSUF AGHA, Ambassador from Turkey to the British Court. Written by himself, and translated from the Turkish by the Ritter JOSEPH VON HAMMER, F.M.R.A.S.*

Read the 19th of May 1832.

TUESDAY, the 8th of *Rajab* 1209 (29th January 1795), having been fixed upon for delivering, with splendour and ceremony, the imperial letters and presents entrusted to me, the *شوالير*, or officer acting as master of the ceremonies, and the secretary to the KING, waited upon us three days previous, and announced that they had His Majesty's commands to regulate the forms and ceremonies of the audience, and that they were most anxious to do every thing in their power to honour and oblige us.

Barges having been prepared for our passage up the Thames, we begged to be favoured with a journey by land, as the winter was uncommonly severe, and the greater part of the river was frozen over, on which account the way by water would be attended with many inconveniences and difficulties. Our wishes were complied with, and it was intimated that a field-marshal* was appointed by the king to prepare refreshments for us at Chelsea (which is an hour's distance from London, situated on the river Thames); that we should there find infantry and cavalry; that the field-marshal would come to meet us at the aforesaid palace, and declare his satisfaction in having been appointed to so honourable and distinguished a service; that a royal carriage with six horses would be sent for us, another for the secretary, the bearer of the Imperial credentials, and two others empty, to dignify our procession; that carriages would also be sent from Her Majesty the QUEEN, and His Royal Highness the Prince of WALES (heir to the throne), from the second and third sons of the KING, from his brother, and from other great lords, and in each of them an honourable person, making altogether about twenty carriages; that the first chamberlain of the Prince of WALES, my Lord JERSEY, had been appointed our *mihmándár*; that on the day

* Field-marshal Sir GEORGE HOWARD, Governor of Chelsea College.

appointed, at ten o'clock, according to the European time, that is to say two hours before noon, we should arrive at the palace, partake there, with the great men commissioned for that purpose, of refreshments which would be prepared for us, and then continue our course; that we should adorn the horses sent as presents, and let them be led before us; that, proceeding with dignity and solemnity from the palace at Chelsea, we should at one o'clock arrive at the king's palace, where another *mihmándár*, a lord, would come to meet us, and conduct us to the rooms prepared for our reception, whence, after a short repast, we should proceed with a dignified step to deliver the imperial letters. All this was fixed and arranged by verbal communications. The following day a letter arrived from the field-marshal, acquainting us that he had been appointed by the king to make the arrangements, and to prepare the refreshments, for our honourable reception; that this commission was to him the source of honour and happiness; that at the appointed hour he should arrive at the above-mentioned palace; and that, with God's assistance, he would use every effort in his power to receive us in an honourable manner; and concluded his letter with wishes for the lasting greatness of the Sublime Porte.

The first chamberlain of the king informed us that it would be advisable to send the presents; that is, the *poghcheh*,* or shawl stuffs, and such like things, the jewelled aigrettes, pistols, and packets of coffee to the king's palace, a day before the audience. In compliance with this intimation, the above-mentioned presents were sent on Wednesday afternoon, with the lists containing their names and descriptions: they were put into carriages, and conveyed by our first interpreter to the first chamberlain. Early next morning (Thursday), the horses, brought as presents, were sent, accompanied by our men, to the palace at Chelsea, to be adorned and ready by the time of our arrival.

At the proper time, the humble writer of this memoir, accompanied by his secretary and interpreter, entered the carriages; and as soon as we came near the palace, the cavalry, which was drawn up in two lines, unfurled their colours, when the sounds of the music pierced the seven heavens. As we approached the gate of the palace, the infantry paid us similar honours. We passed through the streets they formed for us; and on arriving at the

* *پونجه* means a bundle of shawls or stuffs wrapped up in a handkerchief.

palace, we were received by the field-marshal and the other officers. Having entered the room, the field-marshal read a paper, the contents of which, as explained by our interpreter, were as follows :

“ I, who am the commander of this delightful palace, which has been built for the gallant warriors who, exerting themselves with the utmost bravery in battle, prove their courage and zeal by the sacrifice of their persons, consider it as the highest honour and happiness to have been appointed by His Majesty the KING in a manner so incomparable* and auspicious, to do the honours of hospitality to your Excellency the ambassador from the Sublime Porte. May God Almighty, who fulfils all desires, prosper the affairs of commerce, which are calculated to increase the good understanding and harmony that exist between the two courts; and may His Providence possess your Excellency's heart with peace and comfort !”

To this, we replied in the following speech :—“ Agreeably to the sincere friendship and good understanding existing between His Majesty and the most glorious, most powerful, and most generous PÁDISHÁH, the refuge of the world, our gracious Lord has been pleased to strengthen the relations of commerce, by which the inhabitants of the two countries must be more closely united to each other; *bye-and-bye* † you will, with God's assistance, see the fruits, proving that the Sublime Porte refuses nothing to the English. We consider it as a particular favour of His Majesty the KING, that you, my friend, have been appointed to receive us; we are gratified by it, and entertain the best wishes for your lasting health and welfare.”

After this answer, our *mihmándár*, Lord JERSEY, came to invite us, and announced his commission by saying, “ I am commanded to deliver to your Excellency the following message from His Majesty, the most illustrious and puissant king, my gracious lord, which he was pleased to declare verbally : “ As the most perfect friendship and harmony reigns between us and the most illustrious, most noble, and most courageous PÁDISHÁH of the

* مثل نا مسلوكت.

† رفته رفتہ. It seems the ambassador was aware that “ *bye-and-bye* ” was a phrase that would please the English; because, in a campaign in which both nations had fought together, *bye-and-bye* was the constant reply of the Turkish soldiers and marines, when roused and pressed by the English sailors and soldiers, crying, *Háideh ! háideh !* “ Go on ! go on ! ” Thus each of the two nations first learnt from each other the phrase most congenial to their character—the English that of *activity*, the Turks that of *tardiness*.

Islám and SHÁHINSHÁH (king of kings), his choice of an ambassador to this country affords us the highest pleasure and satisfaction.'” He added, that he esteemed himself fortunate in having been honoured with such a commission.

We replied in the following words:—“The true friendship existing between the Sublime Porte and England is generally known; and the sincere wishes of His Majesty, the most glorious, most noble and puissant PÁDISHÁH, my most gracious lord and master, to strengthen this mutual friendship, are manifested by this extraordinary embassy. We are much flattered by His Majesty’s expression of satisfaction towards the Sublime Porte, and our mission, and that this message has been communicated through you we consider a distinguished favour. May you continue to enjoy good health, and may you have long life.”

After this we partook of the prepared repast, which consisted of sweet-meats, fruit, and coffee. The horses being prepared, the men of our suite dressed, and notice being given that every thing was ready, we delivered the imperial credentials (after having kissed them with the most profound respect and reverence) into the hands of the secretary. Those who were present accompanied us as far as the carriages. We were seated on the right; on our left was the *mihmándár*, opposite to us the officer acting as master of ceremonies, and our interpreter. We wore the great turban called *khórásní*,* and our dress was a sable robe. Eight of our servants with shawl girdles walked beside our carriage, and four others beside the carriage in which the imperial credentials were conveyed. The lead was taken by the carriage of my lord, the Secretary of State; behind which, mounted on a well caparisoned horse, was one of our men acting as master of the horse, and dressed in scarlet with gold buckles, followed by the horses for presents, all richly caparisoned, led on at a slow pace, and snorting and prancing at every step they took. After them followed the humble writer of this memoir, in the royal carriage; then the carriage of the secretary of the embassy with the imperial credentials, the two spare royal carriages, those of the QUEEN, of the Prince of WALES, of his brother the Duke of YORK, of his younger brother the Duke of CLARENCE, and of the KING’s brother the Duke of GLOUCESTER, having an honourable person in each of them, and the whole moving in procession.† Next, in a carriage

* خراساني.

† علي التوالي بربريني والي وتالي.

and six, followed the young gentlemen of our suite, and our second interpreter GLIGORASCO ; after them, about twenty carriages of the nobility. The whole was accompanied by a squadron of hussars ; and to prevent the pressure of the crowd, and to preserve the order of the procession, two hundred officers of police, with sticks in their hands, marched on the right and left, clearing the road, and thus the whole train moved in great pomp and state. The cavalry drawn up on both sides, and the officers of police walking on foot used every exertion to shew their zeal, and perform their respective functions. Those who looked on were amazed and astonished ; yet without the least hindrance from the immense crowd, we arrived at the garden of the KING, called St. James's Park. Here is the palace of the QUEEN, from the windows of which, the KING, the QUEEN, the PRINCESSES and their relatives were looking at the procession. As they had never before seen horses so richly dressed and caparisoned, they were extremely pleased, and had the horses led near the palace windows, in order to have a better view of them. This stopped the carriages for a few minutes, after which they moved again. Coming out by the gate of the garden called the Green Park, we came into the high road called Piccadilly, and in regular order, to the gate of St. James's Palace. Here the horses were sent away to their places, and we were met by the secretary of His Majesty the KING (Secretary of State), and the second *mihmándár*, my Lord Bosco,* who conducted us to a room, where we rested. Here were drawn up the officers† of the palace (the Guards), who, as we passed between them, paid us obeisance (presented arms).

All this time the imperial credentials (the source of favour) were in the hands of our secretary of the embassy. After the lapse of a quarter of an hour, one of the lords came to invite us to the room of the *diván* (state apartment), where the king was seated on a seat of red velvet, appropriated to himself alone, and where all the great men and ministers, and the foreign envoys, were assembled in the form of a *diván*. When he had delivered his message, another lord came to arrange the gentlemen of our suite. These were followed by our *Dragoman*, the English interpreter, and the Secretary of the KING (Secretary of State) ; after them followed our secretary, bearing the imperial letters ; and after him, the humble writer of this memoir,

* HUGH BOSCAWEN, Esq., Knight Marshal, and Marshal of the Ceremonies.

† كشي زاده.

with the *mihmándár* on the right, and the lord the master of the ceremonies on the left. On leaving the room, another of the great men, my Lord AYLESFORD,* came to invite us, and delivered his message; we moved on and arrived at the door of the *diván* room, where the gentlemen of our suite, the interpreters, and those who accompanied them, opened on both sides to make room for the first chamberlain, who had advanced to meet us. He walked on the right, the *mihmándár* taking the left, and I took the imperial letters (the sources of all favour) into my hands. As we entered the door of the *diván*, the king more than once took his hat in his hand to testify his respect for the imperial credentials. When we reached the centre of the room, His Majesty arose; and we having come forward to him, made the following speech:—"The Sublime Porte, actuated by a most ardent desire to confirm and strengthen the edifice of harmony and good understanding, which from of old has been supported on pillars of strength, between the Sublime Porte, of everlasting duration, and the court of England; and wishing also to further the free and easy passage of merchants and travellers, subjects of both empires, has nominated this well-wishing servant its ambassador extraordinary (*büyúk ilchi*) in order to complete the arrangements for that desirable end, and to augment and strengthen the friendship and sincere feelings of unanimity and concord between the two courts. I trust that, with God's assistance, general good and reciprocal advantages to the inhabitants of the two empires will result from it; and that the wishes, which have in view the good end of peace and security, will be fulfilled, through the medium of this humble servant, to the satisfaction of all."

This speech having been translated by the interpreter, His Majesty replied in the following terms:

"Being fully aware of the existence, and of the increase of good feeling and friendly inclination on the part of the most distinguished, most noble and powerful PÁDISHÁH of Islám, and most honourable SHÁHINSHÁH (king of kings), it is confirmed by your declaration and assurance, and your embassy is considered as a still further proof of it. Similar feelings being incumbent on our part, the Sublime Porte may rest assured

* JAMES ROBERTS, Esq., Lieutenant of the Yeomen; Lord AYLESFORD, the Captain of the Yeomen of the Guard, being absent.

of my earnest desire to strengthen and augment the concord and good understanding which have for ages existed between the two empires. It affords me special satisfaction that you have been chosen for this fortunate and gratifying embassy ; and I beg you will assure His Majesty, the distinguished, noble and victorious PÁDISHÁH of the *Islám*, of my best wishes and sincere desires for the constant increase of his good-fortune, greatness, and honour.”

This speech having been translated by the interpreter of the *diván*, I replied :—“ His Majesty need not at all doubt to reap the fruits of my sincerity.” I then with great respect took the imperial credentials out of the hands of the secretary of the embassy, and said : “ These are the letters (the source of all favour) from His Majesty who adorns the throne of the *Ottomans*, the most glorious, most noble, most illustrious and most powerful PÁDISHÁH, our most gracious lord and master, SULTÁN SELÍM, which manifest his friendship for your Majesty, his illustrious, noble and worthy friend.” I kissed the credentials, and gave them from my own hands into those of the king, who took them in the most respectful manner, and handed them over to my Lord GRENVILLE, the Secretary of State for Foreign Affairs. Having in the same manner delivered the letter from His Highness the Grand Vezír, we announced to His Majesty, through our interpreter, the names of the gentlemen of our suite ; and having accomplished the duties of our embassy, we retired and returned. The Secretary of State came after us to tell us that he was commanded by the King to inform us that he was much pleased with the imperial presents, and particularly so with the horses and pistols. I replied : “ The presents of friendship are valued by true friends ; the king’s gracious approbation is as the perfume of musk, and affords us infinite joy and inconceivable pleasure.”

The second chamberlain then came to invite us from Her Majesty the QUEEN. We proceeded in the former order, conducted by her first chamberlain, my Lord BURTON (MORTON?). She arose at our entrance ; and when we had come up to her, we spoke to the following effect :

“ In consequence of the sincere friendship and harmony, existing between the Sublime Porte and the British Empire, His Majesty the most glorious, noble, and powerful PÁDISHÁH, the refuge of the world, my most gracious lord and master, has cherished in his heart a special attachment and friendship for the English Court, and has appointed this

humble servant his ambassador extraordinary, in order to increase this friendship and attachment. Your Majesty's having honoured me with the favour of this flattering audience, is a new proof of increasing friendship and kindness; and I doubt not His Majesty the most glorious, noble, and powerful PÁDISHÁH, will be highly gratified by it."

The QUEEN replied: "I am much obliged to his Majesty the most glorious, noble, and powerful PÁDISHÁH for instituting this welcome and pleasing * embassy; and the choice having fallen on so auspicious a person as your Excellency,† there is no doubt the friendship which has so long existed between the two empires will, with God's assistance, be strengthened and cemented by the prolongation of your stay." Having read the paper containing this speech, it was translated by the interpreter; and Her Majesty returned thanks verbally, and expressed her satisfaction and pleasure with the imperial presents, particularly with the jewelled aigrette with which her eldest daughter had, through the imperial favour, been distinguished above her equals. She was delighted with it, and her speech overflowed with wishes and prayers for the long life and the increase of the splendour and glory of His Majesty the PÁDISHÁH. I said: "With your permission I will report your satisfaction and gratitude to the Sublime Porte; and His Majesty the most exalted, noble and powerful PÁDISHÁH will derive much pleasure to hear of your noble bearing." She replied: "I will owe this grace to the favour of the ambassador." It was, in truth, a lovely and delightful assembly.‡ After having announced the names of the attendants, my companions, we retired.

In this assembly we observed the great joy and pleasure occasioned by the imperial presents, and in particular by the jewelled aigrettes. The QUEEN stuck her's on the left side next to her heart, and her daughter fixed her's on her head. They looked upon them as talismans of the soul; and shewing them with great exultation to the duchesses and ladies, said: "We have now been declared dignified Sultanas by the Sublime Porte."

Having by the favour and assistance of God, and the blessing of the Lord of the Saints (the prophet), discharged the duties of the embassy in a manner the most dignified and most conducive to the honour of the Sublime Porte, notice was given us that their Majesties desired to see us again.

* ختم.

† جناب سعادتكثرة.

‡ شو قلو و محبتلو برکوزل مجلس.

Complying with their request, we attended the *dîvân* of the king on several occasions, observing the ceremony of wearing the *khordásáni* turban.

The day of the first audience being remarkably fine, and the sun, which had not been seen for forty days, having made its appearance, flattering compliments were addressed to us, explaining this appearance of the sun as an auspicious sign of the good fortune of the Sublime Porte. To this we replied in appropriate terms, by saying, that we had also seen the QUEEN; and after many flattering words and compliments, we returned home to repose. In very truth, the appearance of the sun on this day was a particular favour of heaven, by which the splendour of the show was heightened and enhanced. There was but one voice amongst the nobility and the people, namely, that so splendid an audience had never been seen. God be praised! God be praised!

On Thursday, the day after the first audience, we sent by our interpreter to the Prince of WALES, the trifling presents we had prepared for him; to the Duke of YORK, a horse caparisoned, together with a bow and arrows; to his lady the Duchess, a parcel of shawls and *a'tr* of roses; to the third son, a sword and an ornamented musket, together with a bow and arrows; to the King, the Queen, and six princesses, shawls and *a'tr* of roses, inquiring at the same time after their healths. We also presented the Master of Ceremonies, the Secretary of State, the *mihmándár*, and the Chamberlain, with parcels of shawls; and others with such presents as were due to their rank; doing our utmost to support the magnificence and splendour of the Sublime Porte.

XXXII. *Remarks on an erroneous Explanation of one of the Inscriptions at Naksh-i-Rustam, occurring in the “Mémoires sur diverses Antiquités de la Perse, par le BARON SILVESTRE DE SACY.” By ROBERT COTTON MONEY, Esq., Secretary Bombay Br. R.A.S.*

(Communicated by the Bombay Branch ROYAL ASIATIC SOCIETY.)

Read the 7th of March 1832.

THE BARON DE SACY, in his essay on the inscriptions and sculptures at *Naksh-i-Rustam*,* by way of reconciling the historical relation to the representation itself, is led to assert that the design illustrates the conquest of ARDASHÍR over the last sovereign of the *Arsacidæ*, or the contest for the crown. The inscription on the horse belonging to the monarch, supposed to be one of the *Arsacidæ*, as copied from NIEBUHR's plate, is ΤΟΤ ΤΟ ΠΡΟCΩΠΙΟΝ ΔΙΟC ΘΕΟΥ, and M. de SACY imagines that the Greek who traced it, if the word be ΔΙΟC, was ignorant of the deity whose name is inserted in the other inscription, *i.e.* μαρδασνε, and gives it as his opinion that the inscription, rightly translated, originally meant,

“ This is the representation of the god HORMUZD,”

one of the last Sassanian kings. From an inspection of the monument, I conceive this to be an error.

In the BARON DE SACY's work,† the inscription A No. 3, belongs to the figures at *Naksh-i-Rajab*; B No. 3, to one of the two mounted kings whom he supposes to be engaged in a contest for the throne, *viz.* to that one who carries a globe on his head; and C No. 3, is on the breast of the horse, whose rider is engaged in disputing his opponent's claim; it must evidently therefore have reference to the figures above it.

* *Mémoires sur diverses Antiquités de la Perse*, etc. 4to. Paris, 1793, pp. 63 and 107, Plate I. The inscriptions explained in this work by the Baron de SACY, were copied from those published by NIEBUHR.

† *Mémoires*, etc. Plate I.

The Baron says that ΔIOC is misplaced here through ignorance or misconception ; and suggests that the word was *Hormisdas*, which it could not possibly be, if the same person is also the last king of the *Arsacidæ*: it is in the word supposed to be ΔIOC that the mistake lies. On examining the inscriptions with minuteness (before I had seen Baron DE SACY's work), the first letter of that word appeared to me evidently not to be a *delta* (Δ), or it must have faded since the time of NIEBUHR, for a semicircle (is now plainly visible in its place, to the right of which, and a little above, I could trace another curve thus ^ ; then followed what certainly appeared to be IOC, but which, for reasons I now offer, I think must have been IOT.

The figure on the left, carrying the globe, exactly resembles those seen on many of the Sassanian coins, particularly on such as bear the head of ARDASHÍR ; the globe appears to be symbolic of royalty in its plenitude of power, and was an emblem peculiar to the monarchs of that dynasty.

It is remarkable that on all the Sassanian coins, no two kings wear the same kind of crown or cap, and that those which represent the face and head of SHÁPÚR, invariably have the *flat cap*, on which the globe is placed. The person supposed by M. DE SACY to be the Arsacian king carries a head-dress exactly similar, but without the globe. Another singular circumstance is, that so far from seeming to dispute about the ring they hold between them, ARTAXERXES or ARDASHÍR is represented more as giving it into the hands of the other individual, who has firmly grasped it, while the former seems scarcely to retain it. It is a fact well known in Persian history, that ARDASHÍR, after a long and prosperous reign, resigned the government into the hands of his son and retired into private life ; an act so unusual would naturally induce the son to commemorate it by a monument like the one I have just described, together with others illustrating the actions of ARDASHÍR, which there is no doubt that the figures ranged below were designed to celebrate ; while the memorials of his own exploits are confined to the sculptures at *Naksh-i-Rajab*, where the inscription * containing his name is to be found.

Should this be the case, it would not be unreasonable to infer that the words on the horse's breast are ΤΟΥΤΟ ΤΟ ΠΡΟΚΩΠΟΝ ΤΙΟΥ ΘΕΟΥ ; and not ΔIOC, which is unintelligible and inexplicable. If the fact is so,

* Mem. Plate I, A No. 3.

then both the statues, the inscriptions, and the historical relations, bear each other out: and should it be ΤΙΟΥ, beyond all doubt the figure is that of SHÁPUR, the son of ARDASHÍR. The ΤΙΟΥΘΕΟΥ occurs thrice in the other inscription after the king's name. Here no name is given: the father's is inscribed on the opposite horse, and it is simply said on this, "This is the representation of the son of (the) God;" the usual title given to ARDASHÍR. Had it been a conquered king, pride would have induced the monarch who erected this as a national monument to explain more clearly the circumstances, either in the words which point him out to be the conqueror, or in those which would have designated the vanquished prince. Had it been intended to show that the latter was contending for the sovereignty, he would not have been distinguished by symbols of power which he did not possess; and there is too striking a difference between the head-dress of the Parthian kings and that here traced, for it possibly to represent one of them, as is supposed by M. DE SACY. I conceive that M. DE SACY was not aware of these words being inscribed on one of the horses in this set of figures, nor am I certain of its having been before explained. The correction of so important an error is principally interesting from its authenticating an extraordinary fact recorded in Persian history.*

NOTE.

THE Council of the ROYAL ASIATIC SOCIETY having considered it proper to submit a copy of the preceding Paper to the Baron DE SACY, that gentleman has favoured the Council with the following remarks on the point at issue:

" Cette inscription † est la plus courte de celles dont j'ai entrepris l'interprétation, et je l'ai mise sous la lettre C. Dans la partie grecque, si l'on s'en rapporte à la copie de NIEBUHR, elle ne contient que ces mots: τοῦτο τὸ πρῶτον Διὸς Θεοῦ. M. MONEY qui sans doute a visité lui-même ces monumens de l'époque des Sassanides, assure qu'au lieu de Διὸς, il y a réellement υἱὸς. Je lui dois le connoissance de la place qu'occupe cette inscription, circonstance que je n'ai pas pu prendre en considération, puisque NIEBUHR avoit négligé de l'indiquer. J'ai essayé de rendre raison de ce qu'il y a de singulier à

* In the first volume of Sir ROBERT KER PORTER's Account of his Travels in Persia, &c. (4to. London, 1820), will be found a detailed description of this, among the other sculptures at *Naksh-i-Rustam*; it is illustrated by a plate containing *fac-similes* of the inscriptions. Sir ROBERT adopts Baron DE SACY's explanation of the monument.

† C No. 3, Mém. Plate I.

trouver le nom d'une divinité grecque sur un monument persan, par une supposition : c'est que l'original persan contenoit le nom d'ORMUZD, qui dans l'intention de l'auteur de l'inscription, étoit le nom d'un prince SASSANIDE, mais que le traducteur grec avoit pris pour celui du plus grand des dieux ou des *izeds* de la Perse, auquel il avoit substitué celui du plus grand des dieux de la Grèce. M. MONEY observe que cette inscription étant placée sur le cheval opposé à celui sur lequel se lit l'inscription d'ARDESCHIR, on ne peut pas admettre qu'il y soit question d'un roi SASSANIDE du nom d'ORMUZD ou HOURMUZD. Il veut que le cavalier qui monte ce cheval, soit SAPOR, fils et successeur d'ARDESCHIR, et expliquant tous les autres *bas-reliefs* où se voit une représentation semblable, par celui-ci, il en conclut qu'ils ont tous rapport—non ainsi que je l'avois conjecturé, au triomphe d'ARDESCHIR sur ARDEVAN, mais à la cession faite par ARDESCHIR de la couronne à son fils SAPOR.

“ Je conviens que mon explication, purement conjecturale, est sujette à d'assez fortes objections, et que le lieu où est tracée la petite inscription, ne lui est point favorable. Mais il me semble qu'il y a des objections au moins aussi fortes, contre le système de M. MONEY : 1°. Il est possible que depuis NIEBUHR, c. à d. soixante-dix ans environ, un accident ait endommagé la lettre Δ de *Δίος* ; 2°. C'est purement par une conjecture arbitraire que M. MONEY y substitue un Τ ; 3°. Il ne fait pas attention que dans l'inscription *Pehlvi* correspondante, on lit אורחם, c'est-à-dire, les premières lettres du nom d'ORMUZD ; 4°. Il substitue, uniquement parceque cela lui est nécessaire, *υιού* à *υιός* que porte, suivant lui-même, le monument ; 5°. Enfin il ne réfléchit pas que si l'on eût voulu dire, sans énoncer aucun nom propre, *la figure du fils du Dieu*, on auroit dit, sans doute, τὸ πρόσωπον τοῦ υἱοῦ τοῦ Θεοῦ. Ces deux dernières observations me semblent peremptoires contre l'opinion de M. MONEY.”

XXXIII. *On the Hindú Quadrature of the Circle, and the infinite Series of the proportion of the circumference to the diameter exhibited in the four S'ástras, the Tantra Sangraham, Yukti Bháshá, Carana Padhati, and Sadratnamála. By CHARLES M. WHISH, Esq., of the Hon. East-India Company's Civil Service on the Madras Establishment.*

(Communicated by the MADRAS LITERARY SOCIETY and AUXILIARY
ROYAL ASIATIC SOCIETY.)

Read the 15th of December 1832.

A'RYAB'HATTA, who flourished in the beginning of the thirty-seventh century of the *Cáli Yuga*,* of which four thousand nine hundred and twenty years have passed, has in his work, the *Aryab'hatiyam*, in which he mentions the period of his birth, exhibited the proportion of the diameter to the circumference of the circle as 20000 to 62832, in the following verse :

*Chaturadhicam śatamashtaguṇandwáshashtistathá sahasráṇám
Ayutadwaya vishcambhasyásannó vritta pariṇáhah.†*

Which is thus translated :

“ The product of one hundred increased by four and multiplied by eight, added to
“ sixty and two thousands, is the circumference of a circle whose diameter is twice ten
“ thousand.”

The author of the *Lilávati*, who lived six centuries after A'RYAB'HATTA, states the proportion as 7 to 22, which, he adds, is sufficiently exact for common purposes. As a more correct or precise circumference, he proposes that the diameter be multiplied by 3927, and the product divided by 1250 ; the quotient will be a very precise circumference. This proportion is the same with that of A'RYAB'HATTA, which is less correct than that of

* Or the sixth century of the Christian era.

† This verse is in the variety of the *Aryavrittam* measure, called *Vipula*.

METIUS, viz. 113 to 355, though in all three the circumference is rated at more than the truth. The *śloca* in the *Lilāvati* is as follows :

*Vyásé bhanandagnihaté vibhacté
Chabāṇasūryaih paridhissussúcshmah
Dwávimṣatinighnévihritétha sailaih
Stúlóthaváśyádvavahárayógyah.”**

A'RYAB'HATTA has not left behind him any record of the means by which he obtained so accurate a proportion. His work however shews so much geometrical knowledge, that there can be little doubt that he effected his approximation in the same manner with ARCHIMEDES, by a numeral calculation of the perimeters of inscribed and circumscribed polygons with the circle ; for in the polygon of 768 sides to a circle whose radius is *one*, the perimeter of the inscribed polygon is 628316, and of the circumscribed 628326. The circumference of the circle will therefore be greater than 628316, but less than 628326, or nearly half their sum, namely, 628321, to which the above approximation is nearly similar.

In the *Súrya Sid'dhánta*, the radius of a circle is stated at 3438, in terms of minutes of the circumference, being about one-quarter of a minute too great ; and in the following *śloca*, it appears that a very coarse rule is laid down by the author.

*Yojanánám śatānyashṭau bhúkarnó dwigunánitu
Jadvargató daśagunát padam bhūparidhirbhavét.†*

“ Square the *yojanas* of the earth's diameter 1600, and multiply the square by 10, and extract the root of the product : the root is the equatorial circumference of the earth.”

In such a matter, the strictest accuracy need not be required ; but for a general rule, this would err considerably from the truth, being less correct than the proportion of 7 to 22 ; and yet we find the same in the *Címa-dógdhrí*, a commentary on the *Súrya Sid'dhánta*, laid down in the following terms :

*Vritta vargát daśa hṛitat padamvyásóbhavédiha
Evam paricshitóvyásah vṛittastu viparítatah.*

“ The root of the square of the circumference divided by ten, is the diameter ; to find the circumference of a given diameter, reverse the rule.”

* This verse is in the *Upajátivṛittam* measure.

† This verse is in the *Anushtubvṛittam* measure.

In the *sástra* named *Tántra Sangraha*, we find the following lines :

Ishta vyásé haté nágavédavahnyabdhichéndubhih
Tithyaṣwivibudhairbhacté susúcshmah paridhirbhavét
Paridhervyatyaýáchaivamsusúcshmam vyaśamánayét
Tithyaṣwivibudhairnighnát chachatancéndunétratah
Súcshmo vyásóhi védagni çritóbhreñdu hñitóthava
Trisaghna chacra liptábhyó vyásórtthéshwagnibhirhñitéh.

Which are thus translated :

“ Multiply any given diameter by 104348, and divide the product by 33215; the quotient is a very correct circumference. To find the diameter, if the circumference be given, reverse the above numbers. If then you multiply the astronomical circumference by 33215, and divide the product by 104348, you will have the diameter in terms of minutes of the periphery ; or it will be sufficiently exact if you multiply the circumference by 113, and divide by 355, for a diameter.”

The astronomer's circle, *anantapura* or “ the universe,” and *chachatan-cendunetram*, is, according to alphabetical notation and symbols respectively, 21600, that is, the terms of the minutes in the circumference of twelve signs, containing each thirty degrees. In the first proportion of 33215 to 104348, if the diameter of a circle be 1, the circumference will be 3.141592653921, &c., which is an excellent approximation, being correct to the ninth place of decimals, the tenth being too large ; the second proportion, 113 to 355, that of METIUS, is a very useful one, being as 1 to 3.1415929, &c., correct to the sixth place of decimals, the seventh being rather more than the truth.

In another work, named *Carana-Padhati*, and in one called *Sadratnamála*, are the two following verses ; the first is from the former work :

Anúnanutnánananunнанutyaiah
Samáhataṣchacra kálávibhactah
Chandámṣuchandrádhamā cumbhipálaih
Vyásastadardhantribhamaurvicásyát.

“ If the circumference of a circle in minutes be multiplied by 1000000000, and the product be divided by 31415926536, the quotient will be the diameter of the circle in terms of the minutes of the circumference, and its half will be the radius.”

In the latter work is the subjoined verse :

Evanchátra parárdha viṣṭritimahá vñittasya nahocsharaih
Syádbhadrámbudhi sidha janma gañitasradáṣmayadbhápúgih.

“ If you proceed thus (as laid down in the former verse), and measure the circumference of a great circle by 10000000000000000 parts, the circumference will be equal to 314159265358979324 of *such parts*.”

The approximations to the true value of the circumference with a given diameter, exhibited in these three works, are so wonderfully correct, that European mathematicians, who seek for such proportion in the doctrine of fluxions, or in the more tedious continual bisection of an arc, will wonder by what means the *Hindú* has been able to extend the proportion to so great a length. Some quotations which I shall make from these three books, will shew that a system of fluxions peculiar to their authors alone among *Hindús*, has been followed by them in establishing their quadratures of the circle ; and a few more verses, which I shall hereafter treat of and explain, will prove, that by the same mode also, the sines, cosines, &c. are found with the greatest accuracy.

I proceed to quote extracts from the *Tántra Sangraham*. The first, of the measure called *A'nushtubrittam*, is from the chapter upon sines, &c.

*Vyásárdham prathamannítwatatóvanyátguṇannayét
Sambandhanniyamanchaivam vynéyóvyása vṛittayóh.*

“ Having found the radius, you may construct the sines ; but you must first know the proportion between the diameter and the circumference.”

The next is of the *Gítivrittam* measure :

*Vyásé varidhinhité rúpa hṛité vyásaságarábhikate
Triṣarádhi vishama sanchyá bhactamṛṇamsvam prithacramát curyát
Yatsanchyayátra haraṇé critérnivrittá hṛitistujámitayá
Tasyá úrdhwa gatáyássamasanchyá taddalamgunóntésyát.
Jadvarggó rúpáyutó háro vyásábdhighátacah prágwat.
Tabhyámáptam swamṛṇé critédhané śódhananchacaraníyám
Súcshmah paridhissasyát bahucritwóharaṇatóti súcshmascha.*

“ Multiply the diameter by 4, and from it subtract and add alternately the quotients obtained by dividing four times the diameter by the odd numbers 3, 5, 7, 9, 11, &c., do thus to the extent required ; and having fixed a limit, take half the even number next less than the last odd divisor for a multiplier, and its square *plus* one for a divisor. Multiply four times the diameter by the multiplier, and divide the product by the divisor, and add it or subtract it, according to the sign of the last quote in the series, from the sum of the series thus the circumference of the given diameter will be obtained very correctly.”

If we proceed according to the rule, we have an infinite series of the following form :

$$C = 4d - \frac{4d}{3} + \frac{4d}{5} - \frac{4d}{7} + \frac{4d}{9} - \frac{4d}{11} + \&c. \pm \frac{4d \times \frac{1}{2}p}{p^2 + 1}$$

where C=circumference, d diameter, and p the last odd divisor diminished by unity. When $d=1$ the series becomes

$$C = 4 \times \left(1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \frac{1}{11} + \&c. \frac{\frac{1}{2}p}{p^2 + 1} \right)$$

Then follows a verse of the *Gitivrittam* measure, explaining more fully the correction by which this series is brought to greater perfection.

*Asmat sucshmatarónyó vilichyatécaschanápi samscárah
Anté samasanchyá dala varyassaicó gunassá éva punah
Yuga gunitó rúpayuttassamasancyá dala ható bhavéddháraḥ
Triṣarádi vishama sanchyá haranát paramé tadéva vácáryam.*

“ I now shew how the correction may be made more complete than in the former
“ rule: take the even figure next greater than the last odd divisor in the series $4 \times$
“ $\left(1 - \frac{1}{3} + \frac{1}{5} - \&c. \right)$ that may have been fixed upon, and square its half, and increase
“ it by *unity*; this is to be a multiplier: this multiplier multiply by 4, and the product
“ increased by unity multiply by half the original even figure; this last product will be
“ a divisor: add to the result of the series the quotient of four times the diameter
“ multiplied by the new multiplier, and divided by the new divisor; the sum will be a
“ more correct circumference.”

The series by means of this correction becomes :

$$C = 4 \times \left(1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \frac{1}{11} + \&c. \pm \frac{\frac{p^2}{4} + 1}{(p^2 + 4 + 1) \frac{p}{2}} \right)$$

p being here the last odd divisor increased by unity.

The author being aware how slowly the series converges, found it necessary to correct the last quote, which is done very correctly by the rule he has exhibited.

Next follows a verse of the *Anushtubrittam* measure.

*Vyásavargádravihatat padamsyát prathamam phalam
Jatastattat phaláchchápíyávaḍṣchántribhirharét
Rupádyayugmasancyábhirllabdéshwéshuyathácramam
Vishamánám yutétýacté yugmayógé vṛitirbhavét.*

“ Multiply any given diameter squared by 12, and extract the root of the product ;
 “ this is the first quote : divide this first by 3 for the second quote ; this second, and each
 “ so obtained quote, divide by 3 continually, place them in order, and divide them in
 “ succession by the odd numbers 1, 3, 5, 7, 9, 11, &c. Then add together the first,
 “ third, fifth, &c., quotes ; and add together also the second, fourth, sixth, &c. quotes ;
 “ then subtract the sum of the even from that of the odd, and the remainder will be the
 “ circumference of the circle, whose diameter was given.”

The series laid down in the verse is thus expressed algebraically :

$$C = \sqrt{12} \times \left(1 - \frac{1}{3 \cdot 3} + \frac{1}{5 \cdot 3^2} - \frac{1}{7 \cdot 3^3} + \frac{1}{9 \cdot 3^4} - \frac{1}{11 \cdot 3^5} + \&c. \right)$$

The next verse is of the *Gítivrittam* measure :

Samapancháhatayóyá rupádyayujás chaturghna mûlayutáh.
Tabhisshódaṣa guṇitádvýását prithagá hṛitétu vishamayaté.
Sama phala yágé tyacté syátishṭa vyása sambhavah paridhik.

“ Divide the diameter multiplied by 16 severally by the fifth power of the odd
 “ numbers 1, 3, 5, 7, 9, &c., adding to each fifth power four times its root ; of the
 “ quotes thus obtained subtract the sum of the second, fourth, sixth, &c. from that of
 “ the first, third, fifth, and seventh, the remainder will be the circumference of the circle
 “ whose diameter was taken.”

This is an infinite series of the following form :

$$C = \frac{16d}{1^5 + 4 \cdot 1} - \frac{16d}{3^5 + 4 \cdot 3} + \frac{16d}{5^5 + 4 \cdot 5} - \frac{16d}{7^5 + 4 \cdot 7} + \frac{16d}{9^5 + 4 \cdot 9} - \&c.$$

Or, if the diameter be *one* :

$$C = 16 \times \left(\frac{1}{1^5 + 4 \cdot 1} - \frac{1}{3^5 + 4 \cdot 3} + \frac{1}{5^5 + 4 \cdot 5} - \frac{1}{7^5 + 4 \cdot 7} + \&c. \right)$$

The next verse of the *Gítivrittam* measure is as follows :

Vyásádwaridhi nihatát prithagáptantryáyugvimûld ghanaih
Trighna vyásé swamṛiṇam cramasah kritwápi paridhivánéyah.

“ Divide four times the given diameter by the cubes of the odd numbers 3, 5, 7, 9,
 “ 11, 13, &c., subtracting from each its respective root ; the quotes thus obtained
 “ alternately add to, and subtract from three times the diameter ; this is the circumfe-
 “ rence of the circle whose diameter was given.”

This is an infinite series (given in the *Carana Padhati* in nearly the same words), as follows :

$$C = 3d + \frac{4d}{3^3 - 3} - \frac{4d}{5^3 - 5} + \frac{4d}{7^3 - 7} - \frac{4d}{9^3 - 9} + \&c.$$

Which, if $d=1$, will be :

$$C=3+4\times\left(\frac{1}{2.3.4}-\frac{1}{4.5.6}+\frac{1}{6.7.8}-\frac{1}{8.9.10}+\&c.\right)$$

The author then proceeds in the same measure :

Dwyádiyujám vacritayó vyécá hárádwiniḡḡḡa vishcambhe
Dhanamrinamanténtyórdhwa gataujacritidwi sahítáharódwighni.

“ Multiply the diameter by 4, and divide the product severally by the squares of the
 “ numbers 2, 4, 6, 8, 10, &c., subtracting 1 from each square : the quotients alternately
 “ add to, and subtract from, twice the diameter : rectify the sum obtained, by taking the
 “ next odd number less than the last even figure squared, squaring it, adding 2 to the
 “ square, doubling this sum, and with this thus obtained as a divisor, dividing four times
 “ the diameter : this quotient add or subtract, as is required, from the sum formerly
 “ obtained, for a very correct circumference.”

The series thus obtained is :

$$C=2d+\frac{4d}{2^2-1}-\frac{4d}{4^2-1}+\frac{4d}{6^2-1}-\frac{4d}{8^2-1}+\&c.\frac{+}{\frac{p-1}{2}^2+2\times 2}\frac{4d}{\frac{p-1}{2}^2+2\times 2}$$

Where C =circumference, d =diameter, and p =the last even number squared in the series, which, if the diameter be 1, becomes,

$$C=2+4\times\left(\frac{1}{1.3}-\frac{1}{3.5}+\frac{1}{5.7}-\frac{1}{7.9}+\&c.\frac{+}{\frac{p-1}{2}^2+2\times 2}\frac{1}{\frac{p-1}{2}^2+2\times 2}\right)$$

This series, viz. $\frac{1}{1.3}-\frac{1}{3.5}+\frac{1}{5.7}-\frac{1}{7.9}+\&c.$ can easily be proved to be equal to the arc of $90^\circ-\frac{1}{2}$, therefore $2+4$ into the series will equal the whole circumference, the diameter being *one*, as in our author's series.

Two other series are then exhibited in lines of the *Giti* measure.

Dwyádéschaturádérva chaturadhicánánniréca vargassyuh
Háráh cunjara gunitá vishcambhasvamati calpitóbhájjah
Phalayutirádyé vrittam bhájjadalam phalavihinamányatra.

“ Take the squares of the terms, diminished by 1, of the two arithmetical progressions
 “ whose first terms are respectively 2 and 4, and ratio of progression 4, for divisors : in
 “ the former series, divide 8 times the diameter by the divisors severally, and the sum of
 “ the quotients is the circumference of the circle ; in the latter, subtract from 4 times
 “ the diameter the sum of the quotients of 8 times the diameter divided by the divisors
 “ severally, and the result is the circumference in the second case.”

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The two series thus explained are found to be of the following forms :

$$C = \frac{8d}{2^2-1} + \frac{8d}{6^2-1} + \frac{8d}{10^2-1} + \frac{8d}{14^2-1} + \frac{8d}{18^2-1} + \&c.$$

$$C = 4d - \left(\frac{8d}{4^2-1} + \frac{8d}{8^2-1} + \frac{8d}{12^2-1} + \frac{8d}{16^2-1} + \&c. \right)$$

Which, if $d=1$, become respectively :

$$C = 8 \times \left(\frac{1}{1.3} + \frac{1}{5.7} + \frac{1}{9.11} + \frac{1}{13.15} + \frac{1}{17.19} + \&c. \right)$$

$$C = 4 - 8 \times \left(\frac{1}{3.5} + \frac{1}{7.9} + \frac{1}{11.13} + \frac{1}{15.17} + \frac{1}{19.21} + \&c. \right)$$

Now, let the former series within the brackets be a , and the latter b ; then it can be easily proved that $a+b$, or the series $\frac{1}{1.3} + \frac{1}{3.5} + \frac{1}{5.7} + \frac{1}{7.9} + \frac{1}{9.11} + \&c. = \frac{1}{2}$; and it has been mentioned above that the series $\frac{1}{1.3} - \frac{1}{3.5} + \frac{1}{5.7} - \frac{1}{7.9} + \&c. =$ (when the diameter is one), the arc of $90^\circ - \frac{1}{2} = a-b$; having therefore the values of $a-b$ and $a+b$, it can be easily proved that $a =$ the arc of 45° , and $b = \frac{1}{2} -$ arc of 45° ; therefore, in the first of these quadratures, $8a =$ circumference, and in the second, $4-8b =$ circumference also, as taught by the author.

The author, after laying down the above series, proceeds to shew in numbers a proportion of the circumference to the diameter in the verse which has been originally quoted and translated, and then finishes his chapter by rules for finding the sines and cosines, of which mention will be made hereafter.

In the *Carana Padhati*, the sixth chapter commences thus :

Vyásacchaturghnát bahuşah prithac sthát
Tripanja saptadyayugáhrítáni
Vyasé chatuoghné cramaşastwriṇam swam
Curyáttadásyát paridhissusúcshmah.

“ Divide the given diameter multiplied by 4 severally and continually by the odd numbers 3, 5, 7, 9, 11, &c., and the quotients thus obtained, alternately subtract from, and add to, the diameter multiplied by 4. The result is the precise circumference.”

This series is the same with the first laid down by the author of the *Tantra Sangraha*, namely,

$$C = 4 \times \left(1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \frac{1}{11} + \&c. \right)$$

The next verse in the chapter is of the measure called *Gitivrittam*.

Vyásádwana samgunítát prithagáptantryádyay ugvimúlaghanaih
Iriguníta vyásé swamṛiṇam Cramaṣah cṛitwápi paridhiránéyah.

“ Divide the given diameter multiplied by 4 severally and continually by the cubes of the odd numbers 3, 5, 7, 9, 11, &c., subtracting from each cube its respective root; the sums thus obtained alternately add to, and subtract from, 3 times the diameter: thus you will obtain the circumference of the circle whose diameter was given.”

This series is also the same with one of the former book, namely,

$$C = 3 + 4 \times \left(\frac{1}{2 \cdot 3 \cdot 4} - \frac{1}{4 \cdot 5 \cdot 6} + \frac{1}{6 \cdot 7 \cdot 8} - \frac{1}{8 \cdot 9 \cdot 10} + \&c. \right)$$

The fourth verse of the chapter is of the measure called *Indra Vajra-vrittam*.

Vargairyujámvadwigunairnnirécaih
Vargícritairvarjitayugma vargaih
Vyásancha shadghnam vibhajét phalam swam
Vyásé trinighné paridhistadásyat.

“ Add to three times the diameter the sum of the quotes obtained by dividing six times the diameter by the square of twice the square minus one of the even numbers 2, 4, 6, 8, 10, &c., subtracting from each the square of its even figure respectively. The sum is the circumference.”

This is an infinite series thus expressed algebraically :

$$C = 3d + \frac{6d}{(2 \cdot 2^2 - 1)^2 - 2^2} + \frac{6d}{(2 \cdot 4^2 - 1)^2 - 4^2} + \frac{6d}{(2 \cdot 6^2 - 1)^2 - 6^2} + \&c.$$

Which, if the diameter = 1, becomes

$$C = 3 + 6 \times \left(\frac{1}{1 \cdot 3 \cdot 3 \cdot 5} + \frac{1}{3 \cdot 5 \cdot 7 \cdot 9} + \frac{1}{5 \cdot 7 \cdot 11 \cdot 13} + \frac{1}{7 \cdot 9 \cdot 15 \cdot 17} + \frac{1}{9 \cdot 11 \cdot 19 \cdot 21} + \&c. \right)$$

The author proceeds with the verse originally quoted, for determining the diameter and radius in terms of minutes of the circumference, and then teaches how, by certain series, the sines, cosines, &c. are to be constructed. He next exhibits a stanza for finding an arc of the circumference of a circle by means of the sum obtained by multiplying the sine of the arc into its radius and dividing the product by its cosine. This sum, it will be readily observed, is equivalent to a tangent of that arc, for cosine is to radius as sine is to tangent; but the tangent individually does not appear in the mathematics of the *Hindús*.

The lines are as follow :

Vyásárdhénahatádabhishta guṇatah Cótýaptamádyam phalam
Jyāvargéna vinighnamádimaphalam tattat phalanchá harél
Crityá cōti guṇasya tatrataphaléshwécatripanchá dibhi
Bhuctéshwójayutéstyajét samayutim jivádhanussishtyaté.

“ Multiply the given sine by radius, and divide the product by cosine for the first quote ; multiply this quote by the square of the sine, and divide the product by the square of the cosine for the second quote : multiply and divide this last quote, and so continually each obtained quote, by the square of the sine and the square of the cosine respectively, and the quotes obtained by this means divide in succession by the odd numbers 1, 3, 5, 7, 9, 11, &c. ; then the sum of the 2d, 4th, 6th, 8th, &c. quotes being subtracted from the sum of the 1st, 3d, 5th, 7th, 9th, &c. quotes, the remainder will be the arc of the sine which was taken.”

Note.—If the cosine be less than the sine of the given angle, change the names of the two, and proceed as laid down in the rule.

The infinite series thus beautifully and concisely expressed in the *Sanscrit slóca*, is the following :

$$a = \frac{r \times s}{\cos.} - \frac{r \times s^3}{3 \cos.^3} + \frac{r \times s^5}{5 \cos.^5} - \frac{r \times s^7}{7 \cos.^7} + \frac{r \times s^9}{9 \cos.^9} - \&c.$$

Where a =arc ; r =radius ; s =sine, and \cos =cosine.

In this series, the first quote equals the tangent of the arc= t ; the second quote equals tangent cubed, divided by thrice radius squared ; the third equals tangent to the fifth power divided by 5 into radius to the fourth power ; or, algebraically, thus :

$$a = t - \frac{t^3}{3 r^2} + \frac{t^5}{5 r^4} - \frac{t^7}{7 r^6} + \frac{t^9}{9 r^8} - \&c.$$

Which is easily proved to be true by a process in fluxions, which demonstrates the fact that the fluxion of the tangent of an arc *is to* the fluxion of the arc itself *as* the square of the secant is to the square of the radius ; in which case, the fluxion of the arc is proved to be equal to $\frac{r^2 \dot{t}}{r^2 + t^2}$ and if $r^2 \dot{t}$ be

divided by $r^2 + t^2$, the quotient will be $\dot{t} - \frac{t^2 \dot{t}}{r^2} + \frac{t^4 \dot{t}}{r^4} - \frac{t^6 \dot{t}}{r^6} + \frac{t^8 \dot{t}}{r^8} - \&c. = \dot{a}$; and

the fluents of each being taken, it becomes $t - \frac{t^3}{3 r^2} + \frac{t^5}{5 r^4} - \frac{t^7}{7 r^6} + \frac{t^9}{9 r^8} - \&c. = a =$ the arc itself, as is laid down in the *Carana Padhati*.

It is also seen that from this verse the matter is derived of the former series ; for if (in the first series) the arc of 45° be taken, then the tangent will be equal to radius ; and if radius = 1, the above series becomes $1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \frac{1}{11} + \&c. = a$; and four times this sum will be the semi-circumference, or when the diameter is 1, the whole circumference ; therefore $4 \times (1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \frac{1}{11} + \&c.)$ the circumference, as shewn in the *Tantra Sangraha*, and in the *Carana Padhati*.

I proceed now to quote some verses from the *Sadratnamála*. The first which I shall extract is from the chapter on sines, and is of the measure called *Sálini-vrittam*.

Vargádyásasyárcanighnāt padamyat
Tatryamśó yastécha tattannavámśúh
Dwigna vyécaicadwi purvajayugmah
Chinnányaicya dwyantaram vrittandáhah.

“ Square the diameter and multiply the product by 12, and extract the root of this product ; the root obtained will be the *modulus* of odd quotes, which if you divide by 3, the quotient will be the *modulus* of even quotes. Divide each modulus continually by 9, and the quotient thus obtained from the former, divide by double the numbers 1, 3, 5, 7, 9, &c. minus 1 respectively, and the quotient obtained from the latter, by double the number 2, 4, 6, 8, 10, &c. minus 1 respectively, add up the new obtained quotes, and subtract the sum of those gotten from the even from the sum of those gotten from the odd modulus, the remainder is the circumference of the circle.”

The next verse of the *Sarddúla-viccrídita* measure is this :

Vyasárcaghnacriteh padegnibhiratónitécha tattat phaláh
Cháthaicyadyayugá hriteslu paridhírbhédóyugójaicyayóh.
Evanchátra parárdha vistríti mahávrittasya náhácsharaih
Syátbhadrámbudhi sidha janma gañitasradhásamayatbhúpagih.

“ Square the diameter and multiply the product by 12, and extract the root of this product ; this root divide continually by 3, and the quotients thus obtained by 1, 3, 5, 7, 9, 11, &c., and subtract the sum of the 2d, 4th, 6th, 8th of the last obtained quotes from the sum of the 1st, 3d, 5th, 7th, 9th, &c. If you do thus, and measure the diameter of a great circle by 10000000000000000 equal parts, the circumference will be equal to 314159265358979324 of such parts.”

The rule laid down in this verse is exactly similar to that communicated by Dr. HALLEY to the Royal Society of London ; and is founded upon the

principles laid down in another *śloca* of the *Vasantitilaca-vrittam* measure in the same chapter, as follows :

Cotihṛita triguṇa bāhu vadhé chatasmá
Tattat phaláchcha bhujavarga hatattu cotyáh
Crityá critéshucha dharágni sarádi bhacte
Shwojaicyatastyajatuyugmayutim dhanustat.

“ The radius into the sine divided by the cosine is the first quote : this multiplied by the square of the sine, and divided by the square of the cosine, is the second quote ; this second, and those obtained continually in the same way, multiply and divide by the square of the sine and the square of the cosine respectively : divide the quotes in order by 1, 3, 5, 7, 9, 11, &c. respectively, and the difference of the sum of the 1st, 3d, 5th, &c., and of the 2d, 4th, 6th, &c., will be the arc whose sine was taken.”

This, of which the meaning is the same with that in the *Carana Padhati*, is expressed thus :

$$a = \frac{r \times s}{\cos.} - \frac{r \times s^3}{3 \cos.^3} + \frac{r \times s^5}{5 \cos.^5} - \frac{r \times s^7}{7 \cos.^7} + \&c.$$

Now if the arc of 30° be taken, the first quote = the tangent of that arc = $\sqrt{\frac{1}{3}}$; to multiply this by the square of the sine, and divide it by the square of the cosine, it is sufficient to divide it simply by 3 (because the square of the sine of 30° is one-third of the square of the cosine of that angle) : divide then each quote in succession by the odd numbers 1, 3, 5, 7, 9, 11, &c., respectively ; the arc, thus obtained, multiplied by 6, will equal the semi-circumference when the radius = 1, or the whole circumference if the diameter be 1 ; but $6 \times \sqrt{\frac{1}{3}} = 2 \times \sqrt{3} = \sqrt{12}$; therefore $\sqrt{12} \times (1 - \frac{1}{3 \cdot 3} + \frac{1}{5 \cdot 3^3} - \frac{1}{7 \cdot 3^5} + \frac{1}{9 \cdot 3^7} - \frac{1}{11 \cdot 3^9} + \&c.)$ equals the whole circumference when the diameter is one, according to the rule laid down in the *Sadratnamálah* in the verse “ *Vyasárcaghnacriteh*,” &c., and in the *Tantra Sangraha* in the verse “ *Vyasa Vargadravihatat*,” &c. before quoted. The rule also for finding the sum of any arc from the tangent is thus expressed in the same work in four *ślocas* of the *Anushtub* measure.

Vrittánayana márgínábreshṭa jyáná dhanurnayét
Ishta jyá trijyayógrhátát cōtyáptam prathamam phalam
Jyá vargom gunacam critwá coti vargancha háraeam
Prathamádi phalébhyóthá néyáphalalatirmuhuh.
Ecatryádyája santhyábhīrbhactéshwétéshwanucramát
Ojánám yutitastyacte yugma yógé dhanurbhavét
Dóh cōtyóralpamévéshtam calpaníyamihóditam
Muhuh critépi labd'hínánnanyathávasitirbhavet.

“ According to the genius of the rules which we have laid down for the circumference of the circle, the arc of any given sine may be found thus : take a given sine multiplied by radius, and divided by the cosine to the given sine for the first quote ; let the square of the sine be a constant multiplier, and the square of the cosine a constant divisor, the quotes obtained by multiplying and dividing (by these) the first quote, must be placed in order one under the other, and divided in succession by the odd numbers 1, 3, 5, 7, 9, 11, &c. ; then subtract the sum of the even from that of the odd quotes, and the remainder will be the arc whose sine was taken. If the sine of the given arc be greater than its cosine, call *that* the cosine, and the cosine to it the sine.”

Having thus submitted to the inspection of the curious eight different infinite series, extracted from *Bráhmānical* works for the quadrature of the circle, it will be proper to explain by what steps the *Hindú* mathematician has been led to these forms, which have only been made known to Europeans through the method of fluxions, the invention of the illustrious NEWTON. Let us first, however, know the age of these works ; and as far as can be determined, the authors. First, then, it is a fact which I have ascertained beyond a doubt, that the invention of infinite series of these forms has originated in Malabar, and is not, even to this day, known to the eastward of the range of *Ghāts* which divides that country, called in the earliest times *Céram*, from the countries of *Madura*, *Coimbatore*, *Mysore*, and those in succession, to that northward of these provinces.

The author of the *Sadratnamālah* is SANCARA VARMA, the younger brother of the present *Rájá* of *Cadattanāda* near *Tellicherry*, a very intelligent man and acute mathematician. This work, which is a complete system of *Hindú* astronomy, is comprehended in two hundred and eleven verses of different measures, and abounds with fluxional forms and series, to be found in no work of foreign or other Indian countries.

The author of the *Carana Padhati*, whose grandson is now alive in his seventieth year, was PATHUMANA SÓMA YAJI, a *Nambútiri Bráhmāna* of *Tirusívapura* (Trichúr) in Malabar. In the first verse of the commentary on his work, he is thus mentioned :

*Nutuna griha sama sutarachitayah carana padhatervidusha
Bhasham vilichati caschit balanam bhodhanarthamalpadhiyam.*

“ The *Carana Padhati*, a path to arithmetic, composed by NUTUNAGRIHA SÓMA SUTA, I now proceed to explain in the common tongue, to adapt it to the genius of young scholars.”

NUTUNAGRIHA SÓMA SÚTA bears the meaning in *Sanscrita* of the Malabar terms “ PUTHAMANA SÓMA YAJI,” the first word being the name of his house.

The last verse of his work contains its date in numerical letters in terms of days of the *Caliyuga* ; a mode of dating which, in the country, is to be traced back to upwards of one thousand seven hundred years ago, as may be seen in the inscriptions taken from the pagoda of *Tiruvunnúr* near Calicut. The verse is as follows :

*Iti sivapura nam agramajah Capiyajiva
Cimapi Carana padhatyahwayam tantra rupam
Vyadhita ganita metutsamyagalocyasantah
Cathitamihavidantassuntu santosha pantah.*

The words *Ganita Metutsamyac*, written in numbers, amount to 1765653 in terms of days of the present age ; which is found to agree with A.D. 1733, being 86 years and 271 days before the 31st of December 1819 ; SÓMA YAJI was not, however, inventor of the system by which he formed his infinite series.

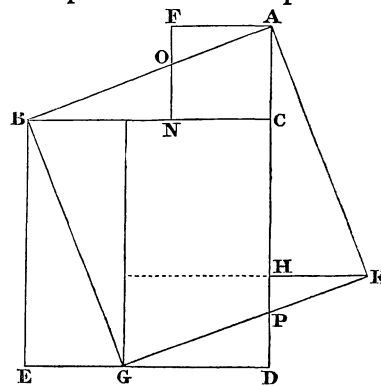
The author of the *Tantra Sangraha*, who was educated in the college of *Bráhmanas* at Trichúr (which college still exists, and which is a place of reputed sanctity, and certainly of respectable learning), has, among his works on arithmetic and astronomy, laid the foundation for a complete system of fluxions, and opened a mine of wealth in mathematics to those students who can boast of being his followers, of which they are most eminently jealous. The copy of the work, which I have obtained with some difficulty, by frequent intercourse with this interesting society, bears in itself marks of antiquity, the commentary in the vulgar tongue being written in a language which is not now generally current in Malabar, and the forms of many letters differing materially from those of the present day.

The author of the work is TALACULATTÚRA NAMBU'TIRI, of *Cérala*, or Malabar ; the first epithet being the name of his house, the latter the title of his rank : he flourished in the forty-sixth century of the present age, or *Caliyuga*.

The testimonies as to the author, and the period in which he lived, are the following, *viz.* The general consent of the learned in Malabar ; the date which is shewn in the commencement of the work itself, namely, the year 4600 of the *Caliyuga* ; the mention made of him in the first chapter of a work named *Driccaranam* by his commentator, the author of the *Yucti-Bháshá*, CELLALURA NAMBUTIRI, in which, while relating the history of the progress of astronomy, from the improvements of A'RYAB'HATTA up

to his own period, he thus observes: "Much difference having occurred
 " in astronomical calculations, in the year of the *Caliyuga* 4532 a *Bráh-*
 " *man* of high rank who lived on the coast of the western ocean, having
 " examined the heavens for twelve years, established what is laid down
 " in the *Tantra-Sangraha*." This is the evidence of the author of the
Yucti-Bháshá, the commentary on the *Tantra-Sangraha*, concerning the
 author of the latter work: the date of the *Driccaranam* is mentioned in
 the latter part of the work, *viz.* the 783d of the Malabar era; and in the
 summary account of the periods of astronomy, it is written 4708 of the
Caliyuga, both of which coincide with the year 1608 of the Christian era.

A farther account of the *Yucti-Bháshá*, the demonstrations of the rules
 for the quadrature of the circle by infinite series, with the series for the
 sines, cosines, and their demonstrations, will be given in a separate paper:
 I shall therefore conclude this, by submitting a simple and curious proof of
 the 47th proposition of EUCLID, extracted from
 the *Yucti-Bháshá*. In the accompanying figure,
 let ABC be a triangle, having the angle at C
 a right angle: on AC describe the square
 ACFN, and on BC describe the square
 BCDE: on ED take EG equal to AC, and
 on AD take AH equal to BC, draw HK
 perpendicular to AD and equal to AC, join
 BG, GK, and AK.



The mathematician will easily prove that the three spaces AFO, PGD, and BEG, parts of the squares ACFN and BCDE not included in the figure ABGK, are equal to, and identical with, the spaces KHP, OBN, and AHK, not occupied by any parts of the above two squares; *id est*, that the sum of the two squares ACFN and BCDE equals the figure ABGK; but this, from its construction, is a square, and is drawn upon the hypotenuse ABC. This is probably the form by which PYTHAGORAS discovered the celebrated problem, which EUCLID afterwards so beautifully illustrated in the 47th proposition of the first book of his 'Elements.'

XXXIV. *Remarks on the Zend Language, and the Zendavesta; in a Letter from the late Professor EMANUEL RASK, F.M.R.A.S., &c. &c., to the Honourable MOUNTSTUART ELPHINSTONE, M.R.A.S., then President of the Literary Society at Bombay.*

(Communicated by the Bombay Branch ROYAL ASIATIC SOCIETY.)

Read the 5th of May 1832.

THE foundation for the following remarks, or the text, as it were, on which I shall comment, will be Mr. ERSKINE'S very learned and curious essay "on the sacred books and religion of the *Pársis*."* My opinion, it is true, differs almost entirely from that of Mr. ERSKINE; but I feel convinced that neither this truly liberal and amiable scholar, nor the LITERARY SOCIETY, will be displeased at seeing the same object represented in two different points of view. Either of the opposite opinions, or perhaps both of them, may be false, and yet the discussion of the subject may effect a step towards that truth and clearness which are the noble ends of every reasonable inquiry. But should you think my remarks fall too far short of this object, or are otherwise too crude and imperfect, I beg you will pardon the attempt, and purify the pages in the favourite element of the *Pársis*.†

M. ANQUETIL DU PERRON, who first translated the *Zend* books into French, did not doubt that the *Zend* was the old language of *Media*, and that the books preserved in that ancient dialect were the authentic works of ZOROASTER, written of course five or six centuries before Christ. Mr. ERSKINE, on the contrary, imagines, first, the *Zend* to be a dialect of *Sanscrit*, introduced from India for religious purposes, and never spoken in any part of Persia; and, second, the *Zend* books to have been composed, or at least restored from memory, changed, augmented, and brought into their present form, in the reign of ARDASHÍR BĀBAGÁN, about 230 years after Christ.

* Vide *Transactions of the Bombay Literary Society*, vol. ii. p. 295.

† Or fire worshippers.

I must confess that the first hypothesis, although far from being proved by ANQUETIL, upon the whole, appears to me the most easy and natural ; and the other, although supported by many sagacious and interesting observations, seems still involved in the most inextricable difficulties.

First, it is remarkable that other learned men (amongst whom is Sir WM. JONES) have supposed, on the contrary, that *Sanscrit* was introduced as a foreign language into India from Irán ; and one cannot help thinking this much more likely, supposing that the great conquest or migration which spread *Sanscrit* all over the northern, and by far the most extensive part of India, had taken place before the beginning of history ; for it is evident that all the modern dialects of *Hindústán*, as well as the *Guzerati* and *Mahratta*, are chiefly derived from *Sanscrit*, and that consequently this must have been introduced into India before they originated ; just as Latin must have existed in Spain and Gaul long before the modern Spanish, Portuguese, and French were formed : but seeing that the grammatical structure of the *Telugu*, *Tamil*, *Carnatacá*, and *Malaya'lma* agrees exactly with the Finnish and Tartar dialects in Northern and Central Asia, I imagine that one great race of men, which may be stiled the Scythian, in the most ancient times, extended from the Frozen Sea to the Indian Ocean, until the chain was broken by a great inundation of people of our own race, which, for want of a more convenient name, I shall venture to call the *Japhetic*, issuing from Eastern Persia, and taking possession of somewhat more than *Hindústán*. Observing on the map how the above-mentioned Indian aborigines of *Malayalam*, of *Carnata*, of *Sholen*, of *Telingana*, &c. are now situated in the southern extremity and along the eastern coast of the country, it appears most likely that they were driven into that situation by the torrent of a warlike people from the west. Another circumstance tends to corroborate this hypothesis : although the northern dialects in India are all derived from the *Sanscrit*, yet they contain a number of words of uncertain origin ; for instance, in *Hindústáni*, روٹی *bread*, توبی *hat*, اتنا *thus, so many*, &c. ; most of these words will be found in the Tamil and other dialects of the south, and therefore seem to be remnants of the aborigines, who were not altogether exterminated or expelled, although greatly overpowered, just as one might find some Gaelic words in modern French, which properly belong to Welsh or *Erse*.

But, to return to Persia : that the *Zend* is not mentioned in the preface to the *Farhang Jehángiri* among the other dialects of *Irán*, a circumstance on which Mr. ERSKINE lays peculiar stress, seems to me of much less

consequence. It shows only that the *Musalmán* author had not extended his inquiries into the *Gueber* antiquities so far back; but knowing the *Pahlaví* to be an obsolete language of the *Guebers*, imagined that all their books were written in that dialect, which mistake I have frequently observed myself even amongst well-informed Europeans. Not only was HYDE much mistaken about these languages;* but even Sir WM. JONES seems, unaccountably enough, to have confounded *Zend* and *Pahlaví* with *Pársí*, or the modern *Gueber* dialect of the Persian.† At all events, the omission is no more to be wondered at than that FIRDAUSÍ makes no mention whatever of the Median dynasty, as Mr. ERSKINE has observed.‡ The fact is, that the *Musalmáns* had no idea whatever of those remote ages, and did not think it worth their while to search after any information about them in the writings of the *Pársís* or the Greeks. AMÍR ABDALLA BEN TAHER's expression respecting the loves of WAMIN and ADHRA, quoted by Mr. ERSKINE, contains the key to this strange ignorance. "We read the *Korán*," said the AMÍR, "we read no books but the *Korán* and the traditions. These others are useless. This is a work of the *Magi*, and is evil in our sight." Besides this, an inquiry into the *Zend*, *Pahlaví*, and Greek records would have required the serious and very difficult study of languages, extremely different from modern Persian, which could never be expected from a *Musalmán*, especially considering the total want of necessary means for such study. Moreover, the enumeration of the Persian dialects in the *Farhang Jehángírí*, is evidently incomplete. Seven are mentioned, of which four belong to the provinces east of the Persian desert, viz. *Soghdí* in Soghdiana, *Herrí* in Khorassán, *Záveli* in Zábulistán, and *Sagzí* in Sejistán; the other three are to be placed west of that great barrier, viz. *Fársí* and *Derí* (the court dialect of *Fárs*) in Fársistán and Kermán, and *Pahlaví*, according to Mr. ERSKINE's most ingenious hypothesis, on the western frontiers of the empire in Khuzistán, Lárístán, and perhaps Kurdistán. By an inspection of the map, it will be seen that no language is assigned to the provinces of Shirván, Gilán, and Aderbaiján, not to speak of Irák, and in short the whole of ancient Media, a country as extensive as one of the great kingdoms of Europe, and just the very country where ZOROASTER, by every

* Vide ANQUETIL DU PERRON's "Vie de ZOROASTRE," in his *Zendavesta*, page 2, note 1.

† In his Treatise on the "Orthography of Asiatic words," fourth specimen.

‡ P. 309, c. 25, in vol. ii. of the *Transactions of the Literary Society of Bombay*.

tradition, is said to have flourished ; where the sacred fires are produced by nature herself ; where the chief seat of the fire-worship is known to have been, and in the name of which (*Adarbaiján*) the old *Zend* word for fire (*atars*) is preserved to this very day, more than two thousand years after the extinction of its ancient power and glory. From all this, I think it may be fairly concluded that the author of the *Farhang Jehángíri* was wholly ignorant of the ancient language of Media, which had been almost entirely supplanted before his time by the Tartar or Turkish ; that he consequently proves nothing either *pro* or *con* ; and that it may, for all he says or omits, as well have been the *Zend* as any thing else.

After having observed that the *Zend* has been omitted in this preface, Mr. ERSKINE next proceeds (p. 299) : “ Indeed there seems no reason to believe that it ever was a spoken language within the limits of the Persian empire. It has every appearance of being foreign to Persia, and its use was probably confined to the sacred books of that country. There can be no doubt in what class of languages the *Zend* is to be ranked, it is altogether *Sanscrit*,” &c. &c. In opposition to others, I beg to observe, that the affinity between *Sanscrit* and *Zend* is by no means sufficient to establish the hypothesis that the *Zend* is an Indian dialect, never spoken any where in Persia ; nor do I find any other sufficient argument for this assertion. The Greek, the Latin, and perhaps more than any European tongue, the Lithuanian, approach very nearly to *Sanscrit* ; yet the former have been, and the latter is, certainly spoken, and that at a great distance from India. Not to speak of the hypothesis formerly mentioned, that the *Sanscrit*, in times anterior to recorded history, probably had issued from Irán, and been spread over India by a conquering people, which would admirably account for the great resemblance of *Zend* and *Sanscrit*. The difference between the *Pahlaví* and *Fársí*, on one hand, and the *Zend* on the other, which Mr. ERSKINE next alleges, equally fails in making good his hypothesis, because the *Pahlaví* and *Fársí* are not to be derived from the *Zend*. The Medians and Persians were two distinct but co-existing nations ; their languages therefore may naturally be supposed to have been two different but kindred dialects. The *Pahlaví* also was not spoken in Media, it originated at least at a considerable distance from this kingdom ; so that it cannot be expected that one of these languages should contain all the roots of the other, especially considering that all the remaining specimens of *Zend* are commonly supposed to have been written five hundred years *before* the Christian era, and

the oldest books of the Persians nine hundred years *after* Christ, which makes a space of fourteen hundred years, during which period, the *Fârsî*, continuing to be a living language, must naturally have undergone a very considerable alteration. With respect to the *Pahlavî*, although it is more ancient than the *Fârsî*, yet as it is confessedly mixed with the latter and Chaldean or Syriac, still less can it be expected that the *Zend* should account for its structure and expressions.

Thus much in the first instance, to invalidate the opinion above mentioned. I shall next try to establish positively that the relation between *Sanscrit* and *Zend* is not so close as to make the latter a mere dialect of the former, nor the difference between the *Zend* and *Fârsî* so great as to make the former appear a foreign language, introduced from another country. I must here insert some grammatical details, which I perhaps overrate as my own discoveries, but which I think indispensable, in order to judge of a language so little known. I even hope they may have some interest for philologists, as they are derived, not from the memoirs and vocabularies of ANQUETIL, but from some of the most accurate and ancient manuscripts existing.

The pronunciation and whole external form of the *Zend* is very different from that of the *Sanscrit*. It has twelve single vowels, fourteen diphthongs (*ai, ái, au, áu, ao, do, ni, ní*), &c., and three triphthongs (*aei, aoi, aou*), besides the syllables formed by the consonants *y* and *w*, and it has thirty consonants. There are some few figures more; for instance, the letter *y* has two forms in the beginning of words different from a third one, used only in the middle, and *w* has one for the beginning, but another for the middle of words; but there are only forty-two * really different letters. In

* As I have no where seen a correct *Zend* alphabet, I shall here go through that given by ANQUETIL in the *Zendavesta*, tom. ii, p. 24, in *Mem. de l'Académie des Belles Lettres*, tom. xxxi, and repeated in MENINSKI's *Thesaurus*, introd. tab. 2 (second edition), in order to show what original character I mean by each of the letters mentioned in the text already, or occurring in the words to be quoted in the following lines. His No. 1 is short *a* or *u*, according to GILCHRIST's system, but not *e*; No. 2 is *b*, No. 3 is *t*, and No. 4 is the English *j*, or French *dj*; No. 5 contains two distinct letters, as I infer from finding them used in different words, and never confounded in any good manuscript; the latter character I take for *q*, or the Arab *ق*; the former for the same letter aspirated *qh*, that is to say *ç*, because I have observed that the line which makes the lower part of the figure even in other letters, denotes aspiration. No 6 contains four characters, which make three distinct letters: the first is the common *d*; the second I would express by the Anglo-Saxon and Icelandic *ð*, it is never confounded, though sometimes

Sanscrit there are also twelve single vowels; but four of them are quite different from *Zend*, viz. *rī*, *ṛī*, *lū*, *lū*. Sanscrit has only two diphthongs (*ei*, *ou*), and

sometimes regularly interchanged with *d*; the two last characters are only various modes of writing the same letter, viz. *th*, formed from *t* by the sign of aspiration just mentioned. Nos. 7 and 8 are the English letters *r* and *z*, not the German *z* or *ts*. No. 9 is a kind of *s*, corresponding to the first *s* in Nagari श्रः : I would express it in European characters by *ç*, because it is usually changed to *c* or *k* in connected languages; for instance, the Sanscrit *paçah*, *Zend* *paçus*, is the Latin *pecus*, &c. No. 10 exhibits three characters: the first is the common *s*, but frequently confounded with the last or *sh*, because in *Pahlavi* it is used for *sh*, and *Pahlavi* has been more familiar than *Zend* to the copyists of the *Zendavesta* for a considerable period; in the oldest manuscripts, however, they are pretty accurately distinguished. The character in the middle appears in the best manuscripts in such a form that it is evidently composed of *s* (the first of No. 10) and *k* (No. 13). Of course it is not to be considered as a single letter, but as *sk*; sometimes, however, it is confounded with *sh*. No. 11 is the Arab ع. Nos. 12 and 13 are the common European *f* and *k*. No. 14 contains two characters: the former is the common hard *g*, the latter I suppose to be a mere mistake, as I never met with any such figure for any kind of *g*. No. 15 is our *m*. No. 16 is an aspirated *m*, formed by joining the line of aspiration to the simple *m*; but as it is written indifferently either in this way or with the two distinct characters *hm* (Nos. 19 and 15), it can scarcely be considered but as an abbreviation. No. 17 is our *n*. No. 18 contains two different characters, of distinct use and signification: the latter is the common English and Danish *v* hard, the former is the soft English *w*, in the beginning of words, for in the middle the same sound is expressed by the character No. 35, to which, of course, this ought to have been transposed. No. 19 is the strong English and Danish *h*. No. 20 is the consonant *y* expressed with two different figures, both of which are only used in the beginning of words. No. 21 exhibits, in the first place, the same consonant *y* as written in the middle of words; in the second place, the vowel *i* long. No. 22 is the English *sh*, French *tch*, and Swedish *k*, before *a*, *i*, *y*, *ä* and *ö*; I would rather express it with *c* alone, always to be pronounced as the Italian *ce*, *ci*, because in Sanscrit, and many other Indian languages, it occurs aspirated, and ought then to be written *ch* in analogy with *j*, *jh*, *k*, *kh*, *g*, *gh*, &c. No. 23 is *p*. No. 24 is *ch*, or the French *j*. No. 25 is the vowel *i* short (not *e*), corresponding to the long *i* already mentioned (No. 21). The next number has two characters, representing two different short vowels; the former is the Italian, German, and Danish *u* short, the English *oo* in *book*, *good*, &c.; the latter is the common *o* short. No. 27 is the vowel *ó* long, corresponding to the short *o* just mentioned. No. 28 exhibits two different vowels: the former is the Danish *æ* short, the English *ea* in *measure*, or *a* in *can*, *fancy*; French *è* in *après*, &c., German *ä* short: I prefer writing it with *æ* diphthong, because it occurs frequently long, which must be marked with an accent above, but this requires that the character should have no other mark or accent before hand. It is also, both short and long, written in this way in several other languages; for instance, Greenlandic, Singhalese, (a) &c. The long *ǣ*, which has been quite overlooked by ANQUETIL, is written in *Zend* with the same character as the short, only protracted considerably

(a) Vide CALLAWAY'S Dictionary, Colombo 1821.

has all these letters in genuine Persian, not Arabic, words preserved even till this day; for instance, آفتاب (*áftáb*) "the sun;" آغاز (*ágház*) "beginning;" دهقان (*dehkán*) "a villager;" دختر (*dokhter*) "a daughter;" از (*az*) "of;" زنگ (*zhang*) "rust." This coincidence in sound with the other *Iránian* languages, and difference from the Indian ones, tends strongly to restore the *Zend* from India to the old place assigned to it by ANQUETIL DU PERRON, according to the common hypothesis.

2. The grammatical structure or system of inflexions in the *Zend*, corresponds not only with the *Sanscrit*, but in some instances approaches nearer to the Phrygian class of languages (that is to say, Greek and Latin, with their different dialects); in others it is quite peculiar, which seems to show that it is a distinct language, to be arranged between the *Sanscrit* and Greek. The first class or declension of nouns in *Sanscrit*, viz. those in *an*, *ah*, *á*, the Greek nouns in *ov*, *os*, *η*, are here terminated in *æm*, *ó*, *æ*. The other classes in *Sanscrit* and Greek are also found here, terminating in *is*, *us* (corresponding to the fourth declination in Latin), &c. The neuters in *os*, *us*, for instance, γένος *genus*, are here terminated in *ó*, and have a very peculiar inflexion.

As a specimen of *Zend* declension, I shall here insert some cases of the singular of three different classes of substantives.

Nom.	Zarapustró-paitis	Master.	Manó	Mind.
Voc.	Zarapustra-paiti		(Manó)	
Acc.	Zarapustræm-paitim		Manó	
Instr.	.....		Manağha	
Dat.	Zarapustrái-paite		Manağhe	
Abl.	Zarapustráth-paitois		Manağhó	
Gen.	Zarapustrahe-paitóis		Manağhó.	

The two last paradigms are the *Sanscrit* patih and manah, Greek μενος.

The dative in *ái* is the Greek *αι*, the genitive in *ois* is very different from the *Sanscrit* in *eh* or *yáh*. The neuters in *ó* have substituted *ğh* for *s* in *Sanscrit* and *r* in Latin. The adjectives are declined in the same manner as the substantives. The superlative terminates in *tæmó*, *Sanscrit* *tamah*. The pronouns are in some instances more regular than those in *Sanscrit*: for instance, the accusative singular of the *Sanscrit* word *idam* "this," is here, neuter *imath*, masculine *imæm*, feminine *imam*. The numerals also are by no means mere variations of the *Sanscrit* ones: for instance, *qswas* "six," *Sanscrit* *shas*; *hapta* "seven," which is the Greek *ἑπτα*, *Sanscrit* *sapta*. The

ordinals are in the masculine *paoiryó*, *bityó*, *prityó*; (Icelandic *priðji*, genitive *priðja*), *túiryó*, *pugðó*, *qstwó*, *haptapó*, *astæmó*, *náumó*, *daçmó*, which differ much more from Sanscrit than the Latin or Lithuanian do. The verbs terminate in *ámi*, *emi*, *omi*, like the Sanscrit, but this termination is also frequent in Æolic and Lithuanian. The conjugation however is nearest to the Sanscrit. The imperative has even here the first person: for instance, on the plate in ANQUETIL'S *Zendavesta*, tom. i, page 77, the fourth line: "*Frawardne mazdayacno, Zarapustris, wídaewó ahura-thkaeshó dátaí hada dátaí wídaewdi Zarapustrái*," &c., which seems not to be the present tense, as ANQUETIL considers it, but a solemn vow: *Venerabor* (*semper ut verus*) *ORMAZDIS cultor, ZOROASTRIS assecla*,* *dæmonum adversarius, sanctæ legis sectator datum* (*hic in mundum?*), *datum contra dæmones ZOROASTREM*,† &c. It is very doubtful whether this *datum contra dæmones*, or *datum* (*nobis*) *antidæmonem*, be really the book *Vendidád*, as ANQUETIL takes it, or only an epithet applied to ZOROASTER, but that it is a solemn declaration, or perhaps prayer, *May I always worship*, &c., and not a mere relation, seems very clear.

3. But to return to the language: *in modern Persian a considerable number of radical words are evidently derived from Zend, not Sanscrit*, which phenomenon cannot easily be accounted for, if the *Zend* were a foreign language, never spoken in Persia; for instance:

Zend.	English.	Persian.	Zend.	English.	Persian.
Gæpó	World	گیتی	Qsafs	Night	شب
A'çmánó	Heaven	آسمان	Drajó	Long	دراز
Hwaræ-qsætó	Sun	خورشید	Zairi	Gold	زر
Mácghó	Moon	ماه	Çtaomi	I praise	ستایم
Máhyó	Month		Mærætó	A man	مرد
Çtárs	Star	ستاره	Cashma	Eye	چشم
Raoqsnó	Light	روشن	Gaoshó	Ear	گوش
A'tars	Fire	آتش	Zafanó	Tongue	زبان
Garæmo	Warm	گرم	Bazwáo	The arm	بازو

* The Zend word *Zarapustris* is an adjective declined, as *paitis*, as might be said in Latin *Zoroastrianus*.

† The Zend verb governs the dative, not the accusative, as the Latin *Veneror*.

Zend.	English.	Persian.	Zend.	English.	Persian.
Záwaræ	Strength	زور	Qhağha (<i>acc.qhağhræm</i>)	Sister	خواهر
Mahrkó	Death	مرگت	Açpó	Horse	اسب
Qsahyó	King	شاه	Mæræghó	Bird	مُرع
Shórpráo	A town	شهر	Pæræçath	He asked	پرسید

I am well aware that several of these words may be compared with *Sanscrit* expressions; nay, some of them appear even in Armenian, Greek, Sclavonian, and Icelandic; but what I would intimate by this comparison is, that the Persians have derived them from the *Zend*; for instance, ستاره is not immediately borrowed from the Sanscrit *tára*, nor from the Greek *αστηρ*, but from the *Zend* *çtárs*; چشم not from the Sanscrit *caxhuh*; بازو not from Sanscrit *bahuh*; زور is a different root from the Sanscrit *çúra*, which also exists in the *Zend* *çúró* “a hero;” اسپ is not from the Sanscrit *açvah* (Latin *equus*), but from the *Zend* *açpó*, and that this is the genuine Iránian form, appears from ancient names, such as *Υζασπης*, &c. In the same way هزار *a thousand*, is clearly derived from the *Zend* *hazağro*, not from the Sanscrit *sahasram*, although these two words may perhaps be originally one and the same, and so in many other instances. This alone seems to put it almost beyond a doubt that the *Zend* was the old popular language, at least of a great part of Irán; for if it were introduced as a sacred language for religious purposes, how came such words and forms of words, not at all religious, to come down to the people, and to be preserved so obstinately by them through a period of more than a thousand years, even after a thorough change of religion? The fact is, that these words belong to the radical expressions, which, even in the most mixed languages, will always betray the true origin of the people; for instance, in English, if you look back to the translations of these words, you will observe, that all the corresponding expressions are Anglo-Saxon, with only a slight change, neither Danish nor French. If now we suppose the true history of England to be lost, and that any body should pretend that the old Anglo-Saxon was mere German, never spoken in the country but introduced with some slight alterations to serve religious purposes, he might be contradicted, merely because such words could never have descended to the people, nor have been preserved by them through a long and dark period in that particular form, different from every other Teutonic dialect, unless the

language to which they originally belonged had once been current among their ancestors.

In addition, I shall only mention two other circumstances, which seem very powerfully to support the old hypothesis, that the *Zend* was the real language of ancient Media. The first is the language of the cuneiform Inscriptions of Persepolis, as far as discovered by Professor GROTEFEND. I will readily allow, with Baron DE SACY, in his letter to MILLIN, that the discovery is not yet completed; but as far as we may judge from the features of an embryo, it looks very like the language of ZOROASTER; and where it is very dissimilar, I am inclined to suspect some mistake; for instance, in the inscription from NIEBUHR, tom. ii, plate 24, quoted in BELLINO'S Account of GROTEFEND'S Discovery,* I doubt the correctness of the genitive plural in *é, ch, á, o*, which is not *Zend*, and suppose the true reading should be *a, n, a, m*, which (*anam*) is the usual termination of genitive plurals of the first class of nouns. The two new letters there restored, viz. *n* and *m*, would also bring the last word of this inscription, *á, kh, é, o, ch, ó, sh, ó, h*, much nearer to *Achæmenides*, which DE SACY expected to find here: I think it ought to be read thus, *ágamnósóh*. The extreme confusion and inaccuracy of ANQUETIL'S alphabet has prevented GROTEFEND, who took it for an established foundation, from determining the true power and number of the letters. Thus, in the *Zend* cuneiform alphabet, exhibited by BELLINO, there are only thirty letters (three of which are marked as doubtful) out of the forty-two really distinct characters mentioned above,† and among those thirty the related letters (for instance, *u, ú, w, v, i, í, y, &c.*) are not accurately distinguished; nay, in the inscription just quoted, one character is read both *é* and *á*, although another character, occurring thrice in the same inscription, is also expressed by *á*. Surely before the discovery is completed, it must be laid down as a fundamental supposition, *that each character has only one determined sound, and that no two characters signify exactly the same*. This last, it is true, is the case with *y* and *w* in the *Zend* written alphabet; but this alphabet, according

* Vide *Transactions of the Literary Society of Bombay*, vol. ii. p. 170.

† Sir WM. JONES has already observed many more letters in these inscriptions. "In five of them," says he, in his *Discourse on the Persians*, "the letters which are separated by points, may be reduced to forty; at least I can distinguish no more essentially different." The remaining two letters did not occur, perhaps, in the five inscriptions he examined.

to Mr. ERSKINE's ingenious observation, is lately formed from the *Pahlavi*, because I fancy the ancient cuneiform alphabet was too inconvenient in books; and by frequent use in hand-writing for many ages, those little excrescences might easily originate, though they cannot reasonably be expected to occur in an ancient original alphabet. It must still be observed that the cuneiform inscriptions are probably not written in ancient *Median*, but in ancient *Persian*; and consequently that all their words and forms cannot justly be expected to agree altogether with *Zend*: but that there should be, notwithstanding this, so strong a resemblance between them and the *Zend*, in spelling, inflexion, and the words themselves is, in my opinion, no slight evidence for the *Zend* having been the ancient language of Media.

The other circumstance I would adduce, is the dialect of an Iránian tribe, called by the Georgians *Osi*, by the Russians *Osetinzi*, living on the very summit of Caucasus; at present without any particular religion, and supposed by M. KLAPROTH (in his journey into the Caucasus and Georgia), from historical probability, to be an ancient *Median* colony. This *Osic* dialect has lost the old complicated grammatical structure, like the modern Persian, but it has preserved some peculiar words and forms, agreeing with the *Zend*, though differing from all other Iránian dialects. I shall only mention a few, extracted from a small but valuable collection in manuscript, kindly communicated to me by the learned Professor F. ADELUNG: *خور* the sun (not *خور*), *Zend* *hwaræ*; *زخ* earth, *Zend* *záo*; *ارت* fire, by transposition in *Zend*, *átars*. Another curious transposition you will have observed in the *Zend* words quoted above, namely *qs* for the modern Persian *sh*, in the European languages *sk*. The *Zend* which, from ancient names in Greek *Ῥαξανα*, &c., we may infer to be the genuine, is also with a slight alteration preserved in *Osic*; for instance, *اخشاف* night; *Zend* *qsafs*, Persian *شب* (*shab*); *اخشار* six, *Zend* *qswas*, Persian *شش* (*shash*); again, *اخشیر* milk, Persian *شیر* (*shír*). We may trace these words in the Icelandic *skúm*, Danish *skumring*, darkness; Icelandic, *skyr*; Danish, *skörmelk*, a sort of sour milk, &c.

As to the authenticity of the *Zendavesta*, it seems to stand or fall with the antiquity and reality of the language wherein it is written: to state nothing, however, without some kind of proof, I shall shortly mention the reasons on which my own persuasion rests. The *Pahlavi*, as well as *Pársí*, evidently presupposes the *Zend*, and it is apparent that the religion

of the *Magi* must have been delivered in *Zend* long before it was preached in *Pahlaví* or *Pársí*. Thus a great number of angels, and other celestial or infernal beings, derive their names in *Pahlaví* and *Pársí* from the *Zend*; and although the signification may now be obscure even in this language, as a dead one, of which the knowledge remains to be recovered, yet the *Zend* form of the words is evidently the genuine and original one, because their terminations are here common ones, and their component parts recur frequently in other combinations, which shows they must have been significant forms and words in this language, afterwards corrupted in *Pahlaví* and *Pársí*, so as to convey no meaning whatever; for instance, *Ahuró mazdáó*, Pahlavi *Anhuma*, Persian *انوما*. The *Pahlaví* may be a corruption of *Elohim* perhaps (instead of *Alhuma*), but the *Pársí* is evidently borrowed from the *Zend*, in which language *Ahuró*, corresponding to the syllable *اور*, is no part of the name of the Deity, but an epithet used even about other beings, and meaning, I suppose, *holy* or *most holy*. *Mazdáó* only is the proper name, therefore the adjective is always dropped in composition; for instance, *Mazda yaçnáó* "a votary of ORMUZD," *Mazda-dátó* "given by ORMUZD," &c. *Agro mainyus* is corrupted to *Ahriman*, which has no distinct signification, whereas the *Zend* expression contains clearly an adjective in the masculine. *Agro*, "bad," "evil," and a substantive masculine *mainyus*, "spirit," derived from the above-mentioned neuter *manó*, "mind," and analogous to the expression *dus-mainyus*, enemy, Persian *دشمن*, Greek *δυσμενης*, *Amæshó çpæntó* is in *Pahlaví* corrupted to *Amhuspand*, in *Pársí* *امشاسپند* which is equally void of sense in both languages: the *Zend* expression consists of a substantive and an adjective; the former I take to be properly the name of *archangels*, the adjective *çpæntó* means *excellent*, *exalted*, and occurs frequently in other combinations; for instance, in the beginning of *Izeshne*, ORMUZD is styled *Mainyus çpæntótæmó*, i.e. *spiritus excellentissimus*. *Missro* (which is instead of *Missras*), is called in *Pahlaví* *Matún*, and in *Pársí* *مهر* (*Mihra*), from the Greek *Μίθρας*. I think it is clear that the *Zend* is the true form of the name. *Qshapró wairyó* is in *Pahlaví* changed to *Shatevin*, in *Pársí* to *شهریور* (*Shahrivar*), which has no meaning; the *Zend* again is composed of a substantive *Qshapro*, a *king*, and an adjective *wairyó*, which the *Pársís* use to translate *مراد کامه*. The first part of the word is both in *Pahlaví* and *Pársí* confounded with *shóipre*, a

town ; Pahlaví *shatun*, Persian شهر, which is, however, another root. It would be to no purport to quote more instances, especially as the *Zend* is still so unknown as to throw little light on the real meaning of those names, nor can it be at all necessary ; as it must certainly have been observed long ago that scarcely any of the names of beings, implements, ceremonies, &c. belonging to the *Pársí* religion (such as *Ohnover*, *Ferverdín*, *Isfend-armed*, *Anirán*, *Ized*, *Barsom*, *Penám*, *Kosti*, *Sadre*, &c. &c.) can be explained by, or even retraced to any other language than *Zend*, which is enough to show that this religion must have been originally founded or instituted in that language. Nor would it else have been preferred to the *Pahlaví* and *Pársí* in all religious prelections and public and private prayers by every one who adores the name of ORMUZD, of what sect and country soever.

It will easily be seen how strongly this remark confirms the opinion that *Zend* was the ancient vernacular language of Media ; for if it be the original language wherein the *Pársí* religion was first promulgated, it most certainly cannot be any foreign dialect at all ; or else, how should it be connected with that religion ? Is the *Pársí* religion to have been introduced into Persia from India ? or did the Persian prophet go to that country, in order to study the Indian language and philosophy ? And, in either case, why has not the sacred language of India been introduced as it was ? How could it enter the mind of that legislator, or of any body, to change almost every word, every declension, and every conjugation of a foreign language, sufficiently obscure as it was ? For, in fact, I scarcely recollect ever meeting with a single word in *Zend* agreeing altogether with *Sanscrit*. Further, why did he introduce a vast number of letters and words never used in any proper Indian dialect, some of which appear even in Greek, German, Icelandic, &c. ; for instance, the preposition *math*, *with* (Latin *cum*), Icelandic *med*, German *met*, Greek μετα. It is worthy of remark even, that the *Zend math*, as well as the Icelandic *med*, and German *met*, govern the *dative* ; whereas, the Greek μετα requires the *genitive* in this sense. In short, I do not see why ZOROASTER should adopt a foreign language ; or, if he had adopted it, how he should have succeeded in converting any body ; nor how, though he, through worldly power, might have introduced his form of worship, that adopted foreign language should ever have penetrated to the commonpeople. Never did any great sage or legislator of antiquity adopt a language foreign to his people. CONFUCIUS wrote in Chinese,

MENU in Sanscrit, MOSES in Hebrew, PYTHAGORAS and LYCURGUS used the Doric, SOLON and SOCRATES the Attic, JESUS the Syriac, the doctrines of ALFATHER (ODIN) are preserved in Icelandic, and those of MUHAMMED in Arabic. It is only in latter ages, remote from the foundation of the religion, when the colloquial dialect changes, or when the religion is propagated to foreign countries, that the religious language becomes different from the vulgar one, because the people cling with veneration to that particular tongue, in which the religion was at first promulgated.

Finally, if the *Zend* was the real tongue of ZOROASTER, in which his religion was originally made known, the *Zend* books cannot possibly have originated in the time of ARDASHÍR BĀBAGÁN. After the religion had been neglected, and the language of the land changed for ages past, how could any thing be forged or composed in such an obsolete and difficult tongue, with three genders, six cases at least in each of the two numbers, six classes of nouns, pronouns of a peculiar inflexion, six or more classes of verbs, with many distinct tenses, all of which are extremely different from the colloquial dialects? How could such a number of complicated rules, which, even with a good grammar at hand, would require a very serious study, be constantly observed in mind in a book as large as the Bible, if it were produced or restored from memory in an ignorant age? Farther, if the priests, countenanced by the government, restored one of the twenty-one books of ZOROASTER, why did not they restore the rest also, or avail themselves of the opportunity to supply the defect by something of their own, or something to the advantage of that government. Certainly, whether the *Zendavesta* is conjectured to have been wholly composed, or only restored by the ignorant priests in the age of ARDASHÍR BĀBAGÁN, it is a miracle a thousand times more improbable than that some fragments, allowed fairly to be less than one-twentieth part of the whole work of ZOROASTER, may have escaped the persecution of ALEXANDER and the indifference of succeeding ages. Nay, it is difficult to conceive how the *Zendavesta* could ever be wholly destroyed: by ALEXANDER it could scarcely be effected throughout that immense empire, and after his time no violent persecution took place until the *Muhammedan* conquest; besides, subsequently to ALEXANDER, the text must have existed, when it was translated into *Pahlavi*. When these translations were made is not yet ascertained; but it is well known that the *Pahlavi* flourished during the reign of the Ashkanian or Parthian dynasty, and the *Pársí* during the Sassanian: as, however, the

old religion was disregarded by the Parthian kings, and ARDESHÍR BABAGAN is famous for his zealous endeavours to restore religion and literature, I think it not improbable they may have been made during his reign, about 230 years A.C.; afterwards the *Pahlaví* even fell into disuse, until it was at last publicly prohibited by an order of the king: consequently, the text must have existed at the time mentioned, and it must have been considerably older, because it was grown so obscure and unintelligible as to require a translation, and the names of beings to be venerated or combated became so obsolete and corrupted, as to lose the signification they originally conveyed; nay, it is evident that the translators in many places did not understand the old text properly, but substituted some folly of their own in the place of its very simple injunctions. I shall only venture to quote one signal instance. In the fourth chapter or *Fargard* of the *Vendidad*, there are mentioned several crimes to be expiated by certain fines; again, the same crimes are enumerated and a corporal punishment determined for each, I imagine in case of want of money to pay the fine; but instead of this, the *Pahlaví* translator speaks of years to be passed in hell! The text cannot, then, have been produced during the dark Ashkanian period; and during the reign of ALEXANDER and his successors it is much less likely; nor is there, to my knowledge, any hint in history or tradition, which might lead to the suspicion that the *Zendavesta* was forged in this whole period. We are then here arrived at the times before ALEXANDER, at the very dynasty under which ZOROASTER is said to have flourished. Farther than this, I by no means pretend to go, nor to determine exactly when ZOROASTER lived. I do not despair, however, that some interesting historical facts, or hints at least, may still be discovered in the *Vistaçp-yesht*, of which I have a very fine copy in *Zend*, perhaps even in the other *Zend* books, when they shall be scrutinized and published by some sober critic who understands the text, which was not the case with ANQUETIL DU PERRON. I am equally far from pretending that all the *Zend* fragments we now have are the genuine works of ZOROASTER himself, but only that they were all of them composed before ALEXANDER or immediately after his conquest. Till that event, I imagine the *Zend* was still a living language, and some prayers, liturgical forms, &c., might easily be composed by the priests long after the prophet was deceased; but after the conquest, a great confusion took place: the old language was lost, the religion neglected, the sacred text was to be

translated, and it seems impossible that any correct piece should have been composed afterwards in such an obscure ancient dialect, or if it were composed, that it should get such an authority and currency, not only among the priests but in every private devotion of the common people.

(Signed) E. RASK.

XXXV. *Some Account of the Kolisurra Silk-Worm of the Deccan, by Captain (now Lieutenant-Colonel) WILLIAM HENRY SYKES, of the Bombay Military Establishment, M.R.A.S., F.R.S., F.G.S., &c. &c.*

(Communicated by the Bombay Branch ROYAL ASIATIC SOCIETY.)

Read the 7th of April 1832.

IN my late researches in that part of the Deccan lying between the sources and junction of the *Bima* and *Mota Mola* rivers, I met with the cocoons* of the silk-worm which is called *Kolisurra* by the Mahrattas. The insect is an object of interest to the manufacturer from the strength of the fibre in the silk it produces.

Dr. ROXBURGH having described the *Tusseht* and *Arrindi* silk-worms of Bengal in the seventh volume of the *Transactions* of the LINNEAN SOCIETY, I was naturally anxious to ascertain whether the *Tusseht* of Bengal and the *Kolisurra* of the Deccan could be identified, or were to be referred to different species. I am indebted to Colonel KENNEDY for facilitating this inquiry by the obliging transmission to me of the seventh volume of the *Transactions* of the LINNEAN SOCIETY; but unhappily some difficulties are opposed to the determination of the question for the present as I have only met with the insect in its *pupa* and *imago* states. Dr. ROXBURGH describes the caterpillar, which I have not seen, but he does not describe the *pupa*, which I possess. In the description of the moth there are strong points of resemblance between the *Bhugi* and *Kolisurra*, but there are also discrepancies which would induce a belief that they are of different species. On the whole, however, it is of very little moment whether my account adds a new species to the already teeming list of the entomologist, or be considered merely auxiliary to the able notices before the public, since it will at least promulgate the knowledge of the existence, on the

* Vide Plate 22, figure 1.

† “*Bhugi* of Birbhúm,”

western coasts of India, of a valuable insect whose labours can be so readily applied to the useful purposes of life.

The following is a description of the animal, so far as I am acquainted with it, in its different stages. *Eggs*, dirty white, ovate, slightly compressed, firm, marked with two brown parallel rings longitudinally.* Impregnation by the male in the moth state for the mere production of eggs unnecessary; since, in several instances, and I have now one before me, the moth deposits its eggs immediately on issuing from its cocoon, without the possibility of its having met the male; but it is to be inferred that they want the vivifying principle. The eggs are one-tenth of an inch long, and of a proportionate diameter to form a compressed oval; they vary in number from a hundred to two hundred, and the moth is occupied from four to six days in their deposition. One moth produced a hundred and thirty, and another a hundred and ninety-six eggs, besides sixteen found in its abdomen after death.

The first egg deposited is seized by the *tarsi*, which are armed with strong, sharp, incurvated claws. The second egg, on its under surface, has a small spot of reddish-coloured glutinous matter, by which it is attached to the preceding egg; each succeeding egg is provided with similar gluten, and is attached by a suitable motion of the abdomen to those that have preceded it: as the body of eggs accumulates, it is gradually drawn up towards the *sternum* by means of the *tarsi* and claws, the operation being assisted by the pushing of the abdomen and by the hind legs; and on the insect having performed the duties imposed on it by nature, it dies, leaving its body as a shield or covering to its eggs. I witnessed this process, but am not satisfied that it is a usual habit, as another moth deposited her eggs without any such manifestation of economical instinct. Under some circumstances, such as the eggs being deposited on a narrow branch of a tree, this covering must be of very little benefit, since it would necessarily be blown away by the wind, or shaken off by the motion of the branch. If it be an instinct, it is probably intended to screen the eggs from the eyes of depredators, as the body could afford them no other defence. Some days after the eggs are deposited, the depression on their sides becomes greater, and ultimately

* Vide Plate 22, figure 2.

each side sinks into a pit or hollow, the egg assuming the form of a double concave lens.* The circumference is still marked with the two parallel rings. I had hundreds of eggs in different years for months in my possession, but the caterpillars never made their appearance : of the larva, therefore, I cannot speak, not having seen it.†

Pupa.—The *pupa* is an inch long, of an oval form,‡ one end obtuse, the other somewhat acuminate. The posterior extremity (*gastro-theca*) consists of a dark brown (occasionally approaching to a black), smooth, leathery case, divided into nine segments or rings; these rings lessening in size to the acuminate end, and corresponding with the abdominal rings of the future moth; each of these has two apertures or spiracles, which are arranged in two lines on either side: the rings appear capable of shutting into each other, like the tubes of a telescope. The obtuse end, comprising the *cephalo-theca* and *cyto-theca*, &c., is protected by a strong leathery hood in several pieces, on the dorsal side touching the fifth ring, and on the abdominal side joining the first ring; the shape of the hood, therefore, resembles that of the body of a coal-skuttle. Through this covering are discoverable the rudiments of the eyes, the hard shell on the back of the head; and even the wings may be traced, with a little assistance from the imagination. When the *pupa* is pricked with a pin, or is otherwise pained or incommoded, it jerks or twists its abdomen.

Cocoon.—Oblong; from one to one and a-quarter of an inch long; has the appearance and almost substance of an exceedingly tough tanned hide; is most firmly attached by a strong cord to a branch of a tree; the cocoon of the male is smaller than that of the female. The animal is said to remain an indefinite time in the *pupa* state, varying from three months to two years. It is converted into the moth while yet in its cocoon, and liberates itself by discharging from its mouth a liquor, which dissolves or loosens that part of the cocoon adjoining to the cord which attaches it to the branch, causing a hole, and admitting of the passage of the moth. The solvent property of this liquid is very remarkable; for that part of the

* Vide Plate 22, figure 3.

† The eggs are said, by Mr. BABER, to hatch in from ten to fifteen days, according to the temperature of the air: the *larvæ* arrive at their full size (two and a-half to three inches) in a month, their prevailing colour being pale or sea-green.

‡ Vide Plate 22, figure 4, *Pupa*.

cocoon against which it is directed, although previously as hard as a piece of wood, becomes soft and pervious as wetted brown-paper. I may observe, however, that on some rare occasions I have found this discharge insufficient to ensure the escape of the moth, which I have been obliged to promote manually; but in all cases a very large opening is left, and the silk threads are entirely severed.

Imago.—In its perfect state the moth is remarkably handsome, if not splendid.* I found its existence limited to a week when confined, those in my possession having died within seven days, and I have no reason to suppose that in a wild state their existence would be prolonged beyond the time necessary for depositing their eggs, which is commonly effected within the week: they did not take any nourishment while they lived. Dr. ROXBURGH's moth of the *Bhugi* had no mouth, nor could I discover, with the assistance of a compound microscope, suctorious organs; but there was decidedly a passage into the stomach (*ventriculus*), which readily admitted of the insertion of a fine needle. By this passage the animal doubtless discharges the fluid which softens the cocoon and facilitates its escape. The absence of the essential organs of the mouth indicates that the moth is only produced to deposit its eggs, and that it does not take food in this state.

Head.—"Roundish, scarcely projecting beyond the anterior margin of the first pair of wings."

Eyes.—"Large, of a dark brown colour," minutely and beautifully reticulated.

Antennæ.—Male. *Bipectinate*, very broad, lanceolate.—Female. *Bipectinate*, very narrow, lanceolate.

Palpi.—Four: the lower ascending, densely covered with hair, the upper pair projecting, incurved, not hairy.

Mouth.—No suctorious organs.

Trunk.—"Oval, completely clothed with fine long orange-brown hair."

Abdomen.—Oblong, ovate, composed of nine parts or rings (Dr. ROXBURGH says seven), including the extreme point. The whole densely covered with fine long orange-brown hair. In the female, the abdomen extends to the margin (or a little beyond) of the posterior wings. In the male, it is considerably shorter.

* Vide Plate 22, figure 5, *Imago*.

Legs.—The first two pair somewhat longer than the posterior legs. The *coxa*, or hip of the first pair, about three-twentieths of an inch long, somewhat compressed, and moving close to the *palpi*, or feelers. The *coxa* of the posterior legs are consolidated with the trunk and immoveable. The *femur*, or thigh, three-tenths of an inch long, compressed. *Tibia*, or shank, three-tenths of an inch long and round. *Tarsus*, or foot, five-twentieths of an inch long, consisting of five joints; the extreme joints longer than those intermediate. The foot very flexible, even after death, while the rest of the members are very rigid.

The *tarsus* is terminated by two incurved sharp claws, which enable the animal to retain a tenacious hold, supporting itself even on the perpendicular sides of a glass tumbler; it may, however, owe the latter faculty to a viscid exudation from the foot. All the legs are densely covered with straight reddish-brown hair.

Wings.—*Alæ* horizontal, expanded with faint whitish stripes in the direction of the nervures. Superior, or first pair, of cream, or orange-brown, darker on the exterior margins than on the abdominal edges; anterior margins slightly convex, and, from the point of insertion to the tip, bounded with a bluish-grey belt, which extends across the thorax; posterior edges slightly concave, ornamented with a broad border, the outer edge of which is greyish, faint green, or yellowish fuscous colour, the centre whitish, and the inner edge of a deep carmine; inner or abdominal edge of the wing straight. In the centre of each wing there is a remarkable eye, the pupil of which resembles transparent mica, surrounded by an iris of the colour of the posterior border of the wings, with an additional narrow circle of black; but the outward segment of the iris has the various colours mingled into a brownish-yellow, excepting the black of the outer ring, which is more prominent than on the inner side. The posterior, or second pair of wings, resemble the first, in colour and ornament, in every respect; the posterior margins, however, are convex. The wings and body are densely covered with straight fine hair, the colour of which varies from cream and dun in the female, to almost rufous or light maron in the male.

The advantage in cultivating the *Kolisurra* is in its feeding indiscriminately on the *sagwan* (teak-tree),* the *bor*,† the *ásana*,‡ and the mulberry, *tút*.§

* *Tectona grandis*. † *Zizyphus jujube*. ‡ *Terminalia alata glabra*. § *Morus Indica*.

The cocoon in the drawing is on the branch of a teak-tree. I have not been able to ascertain that any use is made of the silk of the *Kolisurra* on Western India, although the knowledge of the existence of the insect is universal, from there being an adage in *Mahratta*, that a man who voluntarily involves himself in almost inextricable difficulties is like the *Kolisurra* shut up in its cell. The extensive use, also, by matchlock men of the cocoon cut into thongs, as ligatures for binding the matchlock barrel to the stock, could not fail to diffuse the knowledge of the insect: the thongs are more durable than those of leather.

Wherever Dr. ROXBURGH's description of the *Bhugi* applied to the *Kolisurra*, I have used his language marked by inverted commas.

With respect to the strength of the fibre of the silk, I have to remark, that a single filament or thread supported a weight of one hundred and ninety-eight grains; and in repeated trials, I was cautious to guard against using a double filament, I have no reason to doubt, therefore, the results fairly indicating its strength.

The male moth differs from the female, in the following particulars:—The body is less by one-third; the legs shorter; the *antennæ* oval, or broad lanceolate, instead of narrow lanceolate; the ground-colour of the wings two or three shades darker, and their expansion less; those of the female measuring seven inches across, and of the male five and a-half inches. A male in my possession lived six days without food, and during his confinement deposited daily a quantity of a brownish-white fluid, which had a disagreeable odour.

(Signed) W. H. SYKES.

NOTE.

London, May 21, 1832.

SINCE the above was written, now some years ago, I have reared many of the insects from the *pupa* state, and can bear unhesitating testimony that the females invariably deposited their eggs without the possibility of their having communicated with males: but the eggs were never productive; in fact, they had not been fecundated.

With respect to the *Kolisurra* not being the *Arrindi* silk-worm of Dr. ROXBURGH, which an European entomologist has pronounced it to be, no further evidence is necessary than that of Mr. ATKINSON, who states that the cocoons of the latter are remarkably



COCOON, PUPA, MOTH, and EGGS of the SILK WORM of the DECCAN.

soft and white, and the filament so exceedingly delicate as to render it impossible to wind off the silk. On turning to F. CRAMER (*Papillons exotiques des trois parties du Monde: l'Asie, l'Afrique, et l'Amerique*, Pl. A, 148), there is a figure a good deal resembling the female *Kolisurra*, denominated the *Phalæna* (*Bombyx*) *Paphia*: references are made also in CRAMER to SEBA, tom. iv. tab. 23, fig. 5, 6; to DRURY, tom. ii. tab. 5, fig. 1, under *Phal. Myletta*: but the authors were ignorant of the habits of the insect.

It is of very little moment, however, whether or not the *Kolisurra* be known to naturalists, the object of this paper being to diffuse a knowledge of new facts connected with its economy, and applicability to the uses of man.

The following is a description of the *Bombyx Paphia*, by a distinguished entomologist; the specific characters of the old writers being defective.

W. H. SYKES, Lieut.-Colonel.

Bombyx Paphia.—LINN.

B. alis patentibus falcatis concoloribus flavis: strigis rufis ocelloque fenestrato. Fab.

Habitat in Asia in India Orientali.

Alæ omnes flavæ, anticæ falcatæ strigis duabus violaceo-rubris anteriore undata. Ocellus (antice) annulo exteriori nigro, secundo roseo, tertio albido, quarto flavo-cænososo quinto aurantio, maculâq: fenestrata, lineâ fusca obliquâ par medium disci currente, postice paullo differt, annulo exteriori nigerrimo, 2do. aurantio, 3tio. cænososo, 4toq. flavo. It may here be remarked, that the fuscous line on the anterior wings divides the "*Macula fenestrata*" nearly equally running in an oblique direction. In the posterior wings the fuscous line is drawn over the anterior margin of the disk, and runs obliquely.

F. W. HOPE.

XXXVI. *Copy of a Letter from Sir GRENVILLE TEMPLE, Bart., to Lieut.-General BENJAMIN FORBES, M.R.A.S., relative to a Phœnician Tombstone found at Maghráwah in Tunis, and presented to the ROYAL ASIATIC SOCIETY by Sir GRENVILLE TEMPLE.*

Read the 7th of December 1833.

Malta, 2d July 1833.

THE sepulchral stone with the Phœnician inscription,* I found at *Maghráwah* (مغراوة), a little village in the Beylik of Tunis, situated on the northern declivity of the range of hills, which separates *Muhadhar-al-Hammadah* *Walád Ayár* (محضر الحمادة اولاد عيار), the ancient *Tucca Terebenthina*, from the plain of *Zirrz* زرز inhabited by the *Beni Riss*, a branch of *Dthrédiis*, and on which are seen the ruins of *Assura*, now called *Zanfúr* زنفور. I feel inclined to imagine that *Maghráwah* occupies the situation of one of those Libyo-Phœnician towns or villages which were never colonized by the Romans; for though we find several fragments of coarsely-executed bas-reliefs representing men and animals, evidently of a date anterior to the epoch when sculpture attained any degree of perfection, yet I saw not a single vestige of the workmanship either of the later Carthaginians or of their conquerors. Not the smallest fragment of either capital, frieze, or cornice is discernible. About an hour and a-half's distance from *Maghráwah*, in the direction of *Zanfúr*, is the small village of *Lheys* لهيس, where are found similar remains, mixed however with fragments of Roman inscriptions and sculpture.

The inscription, which I imagine to be written in one of the various Phœnician dialects, is valuable from its scarcity; for during a tour which I made through the whole of the interior of the Beylik, I only found seven or eight inscriptions which were not in Latin; and this one was all that I was enabled to bring away, the others being too large to be carried by a

* Vide the accompanying plate.



horse. It is I think a matter of astonishment that even these few have survived to the present day, when we recollect that the Romans did all in their power to obliterate, by the destruction of the institutions and monuments of the Punic power, all traces of the existence of that nation. The principle of ‘*delenda est Carthago*’ was not confined to the destruction of the capital, but extended itself through all the provinces as far as the vast *Sahâra*, effacing in all directions every thing which could in itself be thought to carry down to future ages the proof of the existence of Rome’s greatest rival.

(Signed) GRENVILLE T. TEMPLE.

XXXVII. *Memoir on the Eastern Branch of the River Indus, giving an Account of the Alterations produced on it by an Earthquake, also a Theory of the formation of the Runn, and some Conjectures on the Route of ALEXANDER THE GREAT; drawn up in the years 1827-1828.—By Lieutenant ALEX^R BURNES, of the Honourable East-India Company's Military Service on the Bombay Establishment.*

PART I.

IN the north-western extremity of our Indian possessions, and under the tropic, is situated the small and sterile territory of Cutch, of importance to the government from its advanced position, but of more attraction to the student of history from its western shore being washed by the waters of the classic Indus and from its proximity to the scene of ALEXANDER's glories.* Divested, however, of these alluring enticements to enter on its history, Cutch is a country peculiarly situated. To the west it has the inconstant and ever varying Indus. To the north and east the tract called *Runn*, which is alternately a dry sandy desert and a muddy inland lake. To the south it has the Gulf of Cutch and the Indian Ocean, with waters receding yearly from its shores.

The physical geography of such a province is full of interest, for besides the alterations in its fluctuating boundaries, it has of late become subject to earthquakes, one of which has produced some unlooked-for changes in the eastern branch of the Indus, and it is particularly to detail and explain these that I have drawn up the present memoir, though it would have been an amusement to myself to embrace a more extended field of inquiry.

Cutch is at present labouring under disadvantages inflicted on it by the vindictive hatred of a jealous and cruel neighbouring government, for previous to the battle of *Jharra*,† which was fought in 1762, when the

* See note A.

† See note B.

natives made a brave stand for their independence against a Sindian invasion of eighty thousand men, the eastern branch of the Indus, commonly called *P'harrán*, emptied itself into the sea by passing the western shore of Cutch, and the country on its banks participated in the advantages which this river bestows throughout its course. Its annual inundations watered the soil and afforded the natives a plentiful supply of rice, the whole country on its banks, then known by the name of *Saira*,* being cultivated.

These blessings, which nature had bestowed on this otherwise barren region, perished with the battle of *Jharra*, for MÍR GHOLÁM SHÁH CÁLORA, irritated at the unsuccessful result of the expedition which he had led into Cutch, returned full of vengeance to Sindé, and inflicted a deep injury on a country which he had otherwise failed to humble. At the village of *Mora* he threw a mound of earth, or as it is called a *band*, across that branch of the Indus which fertilized Cutch, and by thus causing the stream which so much benefited its inhabitants, to flow into other branches of the river, and by leading it through canals to desert portions of his own dominions, he at once destroyed a large and rich tract of irrigated land, and converted a productive rice-country, which had belonged to Cutch, into a sandy desert.

This original *band* did not entirely prevent the water of the Indus reaching Cutch, but it so impeded the progress of the main stream that all agriculture depending on irrigation from it ceased. In process of time, however, this trivial remnant of former prosperity disappeared, and the TÁLPÚRS, the successors of the CÁLORAS in the government of Sindé, caused numerous other *bands* to be raised, and twenty-five years ago, ALÍ MURÁD, the present chief of the *Tharr*,† put a finishing blow to the work of ruin by throwing up the *band* at *Ali Bander*, since which time no fresh water has passed to the sea, even during the swell of the river.

The strip of land which at one time formed the *perganah* of *Saira*, on the banks of this fruitful river, has not since then yielded a blade of vegetation, and has become a part of that *Runn* on which it bordered. The channel

* *Saira* included the country between *Lacpat*, *Saira*, and *Múndán*, and extended a few miles north of *Sindrí*.

† The country north of the *Runn*, and between the Indus and *Párcar*, is so called.

of the river above *Lacpat* had nearly dried up and filled with mud, while that below the town was converted into a creek of the sea, and flooded at every tide.

The *Raos*, or *Rájds*, of Cutch, possessed at one time military stations in three different places of Sinde, viz. *Badína*, *Bállyari*, and *Raoma ca bázár*, yet they bore submissively these indignities which I have described, as well to their own ruin as that of their subjects, and used no exertion to regain from Sinde what nature had bestowed on their country, or to wipe off those injuries which had been offered them, at variance, as they no doubt were, with the law of nations, ill even as it is understood in India.*

In this state of apathy and indifference, there occurred, in the month of June 1819, a severe shock of an earthquake, by which some hundreds of the inhabitants of Cutch perished, and every fortified strong-hold in the country was shaken to its foundation, and wells and rivulets without number were changed from fresh to salt water: but these were trifling incidents compared with the alterations which were brought about in the eastern branch of the Indus and the country bordering on it. At sunset the shock was felt at *Sindrí*, the station at which the Cutch government collected their taxes, and which is situated on the high road from Cutch to Sinde, and on the banks of what had been once the eastern branch of the Indus. The little brick fort of a hundred and fifty feet square, which had been built there for the protection of merchandize, was overwhelmed at once with a tremendous inundation of water from the ocean, which spread on all sides, and in a few hours completely flooded the country, and converted the tract, which had before been hard and dry, into an inland lake, extending for sixteen miles on each side of *Sindrí*. The houses within the walls were instantaneously filled with water and the interior of the fort became a tank, in which, eight years afterwards, I found fish; the only dry spot being where the walls had actually stood, and which continued so from the bricks having fallen on one another. Of the four towers but one now remains; the inhabitants saved themselves from destruction by ascending it, and only reached the land on the following day by boats.

But it was soon discovered that this was not the only alteration effected by this memorable convulsion of nature; as the inhabitants of *Sindrí* observed

* See note C.

at a distance of five miles northward, a mound of earth or sand in a place where previously the soil was low and level. It extended nearly east and west about sixteen miles, and passed completely over this channel of the Indus, separating, as it were for ever, the *P'harrán* river from the sea; and in fact, from this period till 1826, there was no communication between the *band* which GHOLÁM SHÁH had thrown up at *Mora*, and this natural mound which had been raised as I have described. The natives called this "*Allah-band*," or the *band* of God, in allusion to its not being, like the other dams in the Indus, the work of man.

The year 1762 had proved such a calamitous one for Cutch, and the CÁLORAS had then inflicted so deep an injury on the country, that as its inhabitants could never hope to regain those irrigated lands which they had before enjoyed, these wonderful events passed unheeded, for it had become a matter of indifference to Cutch whether the tract which had been a desert since the battle of *Jharra* continued so, or became an inland lake, as in either state it had ceased to yield those advantages to the people which they had once enjoyed. A feeble and unsuccessful attempt was made to establish the custom-house office of Cutch on the natural and newly-raised band, but to this the *Amírs* of Sindé objected, and *Sindrí* being no longer tenable, the *Ráo* withdrew his officers to Cutch.

Matters continued in this state till the month of November 1826, when information was received at *Bhúj* that the Indus had overflowed its banks higher up than Sindé, and that the immense column of water had spread over the desert, and bursting at the same time every *band* in the river, was forcing itself to the sea by the *Runn* of Cutch. In the month of March following I proceeded to investigate the truth of what I have now stated; to examine the natural mound which the earthquake had thrown up, and to trace, if possible, the causes of these constant alterations, on which it will be observed I have hazarded not a few opinions.

The distance from *Lacpat bander* to *Allah-band* is about fifty miles by water, though much less in a straight line. Opposite *Lacpat*, the river is about three hundred yards wide and two or three fathoms deep, and for twelve miles up retains all the appearance of a river, varying in breadth from a hundred to two hundred and fifty yards. At *Sando*, which is about four leagues from *Lacpat*, the waters expand into a vast inland lake, that bounds the horizon on all sides. Yet as this sheet of water is not more than four or five feet deep, it is easy to distinguish the course of the river through

it by sounding, the bed of it being in no place, except *Sando*, less than two or three fathoms deep.

The *Allah-band* being the chief object of interest, I sailed for it at once, and found that the flood, or as it is called, the *nara*, of 1826, had completely cut it through and left a channel forty yards wide and about three fathoms deep, in which the waters of the real Indus were passing to the ocean; and I could not be mistaken in this, as they were perfectly fresh and drinkable, and in such quantity that they had even affected the salt expanse as far down as *Lacpat*, where at low tides the water becomes sweetish. On *Sando* it is brackish, and at *Sindri*, five miles below *Allah-band*, as good as could be wished.

The embankment of *Allah-band* is elevated about ten feet from the level of the river, and is composed of soft clay mixed with shells, having all the appearance of being cut through at some late period, the sides being quite perpendicular. At present the channel through it is only thirty and forty yards wide, but there are marks of the current having extended during the swell two or three hundred yards westward. It will be seen, therefore, that at *Allah-band* the stream once more takes on the appearance of a river, and though narrow, is quite navigable even at this season (March); indeed I there met several boats, laden with *ghí*, which had come from *Wanga*, many miles higher up, and had so far prosecuted their voyage to Cutch, which proves, better than oral information, that every *band* in this branch of the Indus had burst. It is necessary to mention in this place that the *Allah-band* ought not to be looked upon as a narrow bar or strip of earth which had been ejected by the earthquake, for it extends very far inland, perhaps sixteen miles, and by gradually sloping towards the north, unites with the land, which renders it impossible to define its breadth with correctness.*

I shall not venture to give any further account of the river to the north, as it has not come under my personal observation. Be it sufficient to remark that the walls of *Amercót*, a fortress in the desert, have been partially thrown down by this influx of water, and some reports have gone so far as to say that the inundation spread to the *Nueyar* country, at the mouths of the *Luní*, where some of the water escaped into the *Párcar*

* See Part II.

Runn, but this I hope to determine at no distant period ; I can however conceive no improbability in such an occurrence.

Before quitting this part of my subject I must mention, that about two miles higher up than *Sando* there is a celebrated saint's place called *Ibráhím Sháh Pír*, which is held in much veneration by the sailors. It consists merely of a few bricks and bamboos with flags, but is particularly useful, as it serves to point out the entrance to another branch of the Indus, called *Mitra nár*, which is as deep as the one I have described, and which leads to a landing-place called *Dingro*, about twelve miles up, from whence goods are conveyed to *Pállia*, ten miles farther, and thence to *Hydrábdd*. I met five flat-bottomed boats sailing up this branch in one morning,—a convincing proof of its utility. Below *Ibráhím Sháh Pír* is that part of the river called *Sando*, which extends up and down for a distance of two miles, commencing at two *nallás* called *Changásir*, of which notice will be hereafter taken. Previous to the earthquake, it is said that the channel at *Sando* was as deep and narrow as any part of the river, but, whether through the vast quantity of sand which that influx of water brought with it I am not prepared to state, still it is certain that there is now only a depth of two or three feet of water on it, though it has a breadth of a couple of miles.

Having thus described the appearance of the river above *Lacpat*, we shall now turn to the part lower down, between it and the sea. At *Lacpat*, in its course downwards, it runs for six miles north-west to a place called *Cótrí*, where, although there is no water for drinking, there is a halting place, and it is from hence that all merchandize from *Sinde* is shipped for *Cutch*. Eight miles westward of this lies the small fort of *Basta-band*, now in ruins, but previous to the establishment of *Cótrí*, a place of some consequence. It had become, however, a subject of dispute between *Cutch* and *Sinde*, and even of open warfare, which led to its being entirely abandoned. It is badly supplied with water, and was more inconvenient than *Cótrí*, being at a greater distance from *Cutch*. At about fifteen miles south of *Basta-band*, on the *Cutch* side, lies the harbour of *Cotasir*, which can be approached by boats of four and five hundred *candies*, or upwards of a hundred tons, and which is the most westerly point of *Cutch*.* The

* See note D.

landing-place is much exposed, and large boats cannot ascend higher up the river, so that they ship their cargoes on board small craft for *Lacpat*.

The *P'harrán* river had undergone so many alterations that it had even lost the name of the parent stream, and was known on one side of *Alí-band* by the designation of *Corí*, while it was called *P'harrán* on the other. The natives therefore, in speaking of the *Lacpat* branch of the Indus, use always the term of *Corí*, which, from what I can understand, means a creek of the sea. This creek gradually widens below *Lacpat*, and at *Cotasír* the one bank has receded from the other upwards of five miles, and forms its mouth.*

From the halting place of *Cotrí* there is a high road leading through *Pállia* and *Ghárri* to *Hydrádd*, by which route the horses† come annually from *Khórasán* and *Candahár* and are crossed in boats to *Lacpat*. For the first thirty miles the road is a salt desert, and skirts along the inland lake, which was formed by the earthquake, as may be discovered from its passing *Pállia*; and with a view of circumscribing as much as possible the limits on which I shall have to remark, I give this road as the western boundary. The eastern limit of this lake is also skirted by the high road from Cutch to *Sinde*, and which formerly led through *Sindrí*, but is now necessarily sixteen miles eastward of it. It leads from *Narra*, by *Luna*, on the *Banní* or grass lands, to *Raoma-ca-bázár*, and thus encloses an inland sea of about five or perhaps six hundred square miles.

The rivers in a country subject to periodical rains necessarily undergo many alterations, chiefly from the greater velocity and quantity of the water they contain in their channels at different seasons. This has been the case in so striking a manner with the *delta* of the Indus, that neither a harbour nor the course of any particular branch can be depended on for a longer period than a season. The eastern mouth, as I have before said, might be considered as shut against the waters of the main Indus for the last sixty-five years; and though the numerous mouths of this mighty river would seem sufficient for the egress of its waters, yet the bursting of the *bands* in the most paltry branch shew that they have still a tendency to escape by *Lacpat*; and when we look on the map, this does not appear extraordinary, for to the westward the Indus is hemmed in by the rocky

* See note E.

† See note F.

mountains of Balúchistán, while to the eastward it has a low sandy arid desert, by which its waters, when they have once overflowed their banks, would sooner reach the sea than by the regular course of the river.

The cause of the sudden overflow of the Indus is stated to have been the pressure of water on one of the banks of the river, which had been always low, and was formerly raised by artificial means, and called the *Arrore-band*, though it had actually nothing of the nature of the other *bands*, and merely served to keep the water of the main trunk of the Indus in its course to the sea. I am given to understand that this *band* is situated somewhere between that point of the river after it had received the *Panjáb* rivers, below *Uch*, and its entrance into Sind at *Bhacar*, and if I judge rightly, it is in a straight line and nearly due north of *Bhúj*, the capital of Cutch, distant about four degrees of latitude, or two hundred and forty miles. If I am correct in this surmise, it is not difficult to account for the late overflow of the river, as water which runs in a diagonal direction, such as the Indus, the course of which is about south-west, would certainly force for itself a passage due south, if the banks of the river did not completely hem it in, which does not appear to be the case. That the course of the water would always be as it has turned out, is in my mind certain, for the channel through *Allah-band* is in a straight line from *Narra* in Cutch about thirty-five miles due north, and the water which came down in 1826 overflowed opposite *Narra*, and has left pools to this day; and it will be observed that the river changes its course below *Sindri*, that is, opposite *Narra*, sweeping off to the south-west to avoid the hilly country of Cutch, and reaches the sea by the flat marshy tract west of *Lacpat*, which gives a very satisfactory reason for the water overflowing where it did. Immediately after the earthquake, too, the water extended from *Allah-band* towards *Narra* for a distance of twenty miles, and there was a water-communication the whole way for some days after; the guns of *Sindri* were even brought in boats to within two miles of *Narra*. Had this continued, it would have compensated in some degree for the loss of the direct land-route to Sind by *Sindri*, which by its shortness served to expedite the arrival of merchandize in the country, but at present it is neither navigable nor to be passed by land, from the accumulation of mud.

The floods of the Indus commence in April from the melting of the snow in the Himaláya Mountains, and the river decreases to its usual level by September. It is to be remarked, therefore, that the *Arrore-band*, which

caused the overflow, was not broken through within this period, and not for two months after the usual swell of the season had subsided ; so that if the *bands* are not again thrown up, it will have the advantage of future floods to deepen, and still further open the channel through the *Allah-band*, and may again bring back to Cutch its lost fields. I am not sufficiently aware of the breadth of the *P'harrán* river before 1819, to draw a comparison between it and the present channel through *Allah-band*, which is only one hundred and twenty feet wide, though from fifteen to eighteen feet deep.

If the influx of fresh water from the Indus, after passing over a parched and thirsty desert and entering an inland lake by so narrow a channel as that through *Allah-band*, has had such an effect as to sweeten the water above *Sindrí*, to change the whole body of it from salt to brackish, and even extend its influence so low as *Lacpat*, every hope is to be entertained that a further change will take place, for the body of salt sea-water which it passed through, extended for fifty-three miles, and it had besides to contend with tides, certainly not strong ones, but which always flow up as high as *Ibráhm Sháh Pír*, thirty miles above *Lacpat*.

I am disposed to place much reliance on succeeding inundations, and do not look upon it as improbable that the Indus itself may in the dry season once more send off its waters, as it did in 1826. The effect of a repetition of these inundations would clearly tend to deepen the channel of the *P'harrán* river, and thus, pursuing a steady onward course to the sea, it would carry along with it, in process of time, the water that has lodged about *Sindrí*, and which will of course continue as long as there is no stream passing through it, and nothing in fact to disturb it. If this result should follow, the Cutch government will be again put in possession of the *Saira*, which contributed so much to the prosperity of their ancestors. I am not inclined to despair of seeing such a change take place, and instead of looking upon the effects which the late overflow has produced as trifling and unproductive of any material alteration, it seems to me remarkable that the fresh water should have exerted such an influence, considering the field over which it spread had been under the dominion of the sea since 1819, and the enormous quantity of salt water it had to encounter.

I am willing to admit that if the *Allah-band* had never been thrown up, these prospects would have been considerably brightened ; for since 1762 the water had been gradually receding from the river, though it had not left the channel entirely dry, and till the earthquake of 1819, was navigable

only for very small boats as high up as *Sindri*. I fear therefore that the earthquake of 1819, by throwing up this natural mound, opposed a resistance to a temporary approach of the sea, which would otherwise have had egress by the old channel of the *P'harrdn*, and I am inclined to believe that this sheet of water would not have lodged where it has, had it not been checked in its course, but would have in time receded to the ocean.

Besides the resistance which it met with from the *Allah-band*, the earthquake happened at the very time the south-westerly monsoon winds blow, and the body of water which had been impelled up in the first instance by the earthquake was fed, for the four months succeeding that event, by a daily supply from the sea.

The earthquake produced another alteration, which strongly corroborates the above fact, as it was discovered when the shock had passed, that the channel of the *Cori* was much deepened, which I presume the waters had effected before they overflowed their banks, or it perhaps may have occurred afterwards when they experienced the resistance which they did from *Allah-band*. That the channel is deepened there can be no doubt, for boats of fifty *candies* could only approach *Lacpat* previously, and craft of two and three hundred *candies* may be now seen daily sailing up the river. The natives, indeed, assert that this was not brought about at once, but that the river has become deeper yearly. They may be relied on, for we know that previous to the earthquake the river was fordable for cattle both at *Lacpat* and ten miles higher up, where there is now twelve and fifteen feet of water. It appears to me, that the lodgment of the water about *Sindri* had served to bring this change about by keeping up a constant communication between that lake and the sea.

In 1820, Captain D. WILSON, of the Quartermaster-General's department, visited the Indus about ten miles above *Lacpat*, and reported on a ford of the river which he himself had passed over at *Changasir*. A desire to verify the information he procured at that time, led me to the spot where he had made his observations, but I found every portion of the tract and the river itself altogether altered. The ford he had described, and to which I was led by the very guide he himself had employed, was covered with fifteen feet of water at low tide, and the river, instead of being five hundred yards wide as he had described, was only three hundred feet. At *Bitaro*, too, where he had stated it to be only thirty yards wide, I found it upwards of a hundred, and instead of a depth of four fathoms, little more

than two. Further, that officer had approached the Indus from the village of *Saira* by land, and described the route as quite passable; but in attempting it, my progress was arrested by two *nallás*, called *Cótro* and *Chitriári*, that I could hardly approach for clay, and the latter of which had five feet of water, so that besides the danger I incurred in passing over a tract of quick-sand, and *Runn*, which *was affected constantly by the tides*, the river was not even to be approached. I mention these facts from the strong concurrence between them and the reports of the natives, as to the deepening of the river, and the alterations which it has undergone. It is therefore quite out of the question to look any longer for this ford, and did it still exist, the nature of the country is such, that no advantage could be taken of it even for a private individual, much less for the passage of an army.*

It is to be recollected that, previous to the earthquake of 1819, the *Runn* was partially filled every season by the water being blown over it from the *Lacpat* creek, still the return of the hot weather and the north-westerly winds invariably dried it up. These causes have not of late been powerful enough to recover the tract from the sea, though it becomes much shallower after the monsoon, as well no doubt from the fair weather as the constant blowing of the north-westerly breezes, which would carry out the water. It is, perhaps, difficult to support the opinion, but I am led to infer from the above-mentioned fact, that while the *Allah-band* was raised by the earthquake, the country which surrounds *Lacpat* must have been depressed; if such be the case, the chances of the water ever being displaced are very remote, but their longer continuance in their present site seems certainly to afford a ground for belief, that there is a hollow round *Sindri*; nor must we forget that the overflow of salt water near *Sindri* was brought about by an earthquake, not from a flood of the Indus, or from rain.

The conclusion, then, must be, that until the *P'harrán* river disembogues a sufficient quantity of fresh water to dislodge the body of salt about *Sindri*, or brings down such a quantity of alluvium, as will fill up this hollow, if it do exist, there can be little prospect of the people of Cutch regaining the fertile *perganah* of *Sairá*. Allowing such a circumstance to take place, I have very many doubts if any advantage would ever be derived from such an influx of fresh water, for water, when beyond a certain

* See note G.

quantity, whether salt or fresh, is hostile to the purposes of agriculture, and there is no reason to believe that as the present tract continues flooded with salt, it should become dry with fresh water. Further, the banks of the *Pharrán*, although from the nature of the country they never could have been very high, have once been overflowed, and the winds which blow up with violence against the stream when the floods take place (which is during the rains), would always blend a quantity of salt water with it; and much more velocity would be required to force a passage through such a sheet of salt water, than can, I fear, be expected with such a narrow outlet as the flood of 1826 has cut through *Allah-band*. The velocity with which it runs is greatly diminished, immediately it passes that point, for its waters are mixed with those of the salt lake, and it requires little to impede the progress of a stream, the banks of which are for nearly twenty miles under water. The Rhone, which passes through the lake of Geneva, affords an instance similar to the eastern branch of the Indus running through the *Sindrí* sheet of water, and I have been informed that the waters of the European river pursue a steady course through the Lemane lake, with which they hardly mix, as is to be discovered by looking down upon the water, the colour of that of the river and the lake being different.

While we discuss the chances against Cutch regaining its former wealth, it must be allowed that a ray of hope has now broken out where none before existed, and the present state of things may terminate greatly to its advantage. In process of time, should the channel continue deepening, the country about *Sindrí* might be drained and turned to its former purpose, there being reason to believe that the present saline soil, which it has put on from being covered with salt water, would disappear when well saturated with fresh water as the fat and productive soil of *Sairá* has disappeared from the influx of salt water. The *Amírs* of *Sinde*, too, acknowledge the right of the Cutch government to a small *nallá*, called *Caira*, which is now on *Allah-band*, and this, if they choose, can give them a footing at a very important point, and put them in full possession of the grand natural *band*, by far the most formidable on the river.*

But if the country in the neighbourhood of *Sindrí* has been lowered, I

* It is a singular fact, that the boat belonging to *Sindrí* was lying in the *Caira-nallá* when the earthquake happened, and threw up between it and the river "the *band* of GOD."—The Cutch government were in the habit of collecting their revenue either at *Sindrí* or at this *nallá*.

question whether the tract above *Allah-band* would not now become "the *Saira*" of this branch of the river, and to me it appeared only necessary to soak that tract with fresh water to adapt it for the purposes of cultivation, though it is to be remembered that the ground on it is quite salt, like the *Runn* in its neighbourhood.

It is a matter of doubt whether the *Amirs* of *Sinde* have it in contemplation again to throw up the *bands* in the *P'harrán* river. At present they have not commenced operations, from the dread of an inundation similar to that of November 1826, which had nearly annihilated many of the villages in their dominions. Their annual crop has, however, been increased fourfold by that overflow which irrigated parts of the country to which the water had never before extended, and the inhabitants, taking advantage of this, transplanted their rice, and reaped a plentiful harvest. The *Sindians* cannot now be supposed to be actuated by that national hatred towards *Cutch*, which characterized them in the time of the *CÁLÓRAS*, and may have no immediate inducement on that account to renew the *bands*, but it is not to be doubted that the irrigated lands in *Sinde*, bordering on the *P'harrán*, which formerly produced so plentifully, will not now yield an equal quantity without them, for however much a river running through a country may contribute to its fertilization, still it is clear that it must be more productive when that country is intersected by canals, and the water is extended by dams and other artificial means.

But the rice cultivation of *Sairá* was not the only advantage which *Cutch* derived, and will again derive, if this wished-for alteration take place, by the fresh water of the *Indus* washing its shores. The pasture of the banks enabled them to rear numerous herds of cattle, and the whole tract below *Lacpat*, which was not used for rice cultivation, was lined with their flocks and herds even to *Nárayanasír*, on the verge of the sea, and it is not more than twenty years since there were remains of the establishments of these people at *Changasír*, the ford above *Lacpat* before alluded to, for the scanty supply of water which forced itself either over or through the different *bands*, continued to raise grass for cattle, though too small in quantity to irrigate the lands for rice cultivation. The grain produced in the district of *Saira*, too, is said to have been of a very superior quality, and the inhabitants of *Cutch*, before they were confined within their present narrow limits, annually derived three successive crops from it.

In a military point of view I do not think that we have benefited by the

alterations in the river; in its present state it is ill adapted for military operations, and in my opinion renders the approach to the country of the *Amírs* more difficult to a regular army than ever, as formerly we could have transported our artillery across the *bands*, and saved the trouble and expense attendant on a large pontoon train, for the Sindians would never have been enlightened enough to throw down, of their own accord, the *bands* which had been the result of so many years' labour. Should the *P'harrán* undergo the alterations which I have before surmised, it would become useful both in a military and commercial point of view. At present this branch of the Indus is navigable for flat-bottomed boats; and were it not from the shallowness of the river at *Sando*, *dinjís*, or boats with keels, could pass up to *Allah-band*. There is reason to believe that *Sando* will deepen with the other parts of the river.

The military roads which lead into Sinde at present I have described elsewhere, but they have varied with the river, and will of course always depend upon it.* The one which leads most direct from Cutch passes from *Bhúj*, by *Nerona* to *Luna* and *Raoma ca bázár*, across the *Runn*; but there is an inhospitable tract of forty-eight miles without a drop of fresh water, on leaving *Luna*, and yet the traffic across is considerable. The *Sindrí* lake, in proportion as it is full, renders this route circuitous, the winds often blowing water upon it, and it is therefore subject to variation. The natives mistake these encroachments for the tide; but they are clearly in error, as with a strong wind there is always water, and at other times not a drop. I do not consider it by any means so good a route as that leading across the *Pacham* to *Bállyari*; and in invading Sinde it would always be desirable to reach the Indus as high up its *delta* as possible, as rivers will be less frequent in the march of an army, the greater distance the troops are from the sea.

The craft now used in the navigation of the *P'harrán*, or *Corí* river, consists of flat-bottomed boats, called by the natives "*dúndí*," which are square-rigged, with one mast, and from twenty to thirty *candies* burthen. They can only go before the wind; and the people have so little idea of tacking, that the boat in which I sailed was dragged down from *Allah-band* to *Lacpat* through the shallow water by manual labour, and when it

* See note H.

was found too deep, impelled on by bamboos and poles. At *Ibráhm Sháh Pír*, thirteen miles below *Sindrí*, when the bank of the river emerged from the water, the boatmen tracked the "*dúndí*" along by a rope, but the operation is both tedious and laborious, and I did not reach *Lacpat* for fifty-four hours after I had quitted *Allah-band*.

The traffic between *Sinde* and *Cutch* by the *P'harrán* has existed for so short a time, that it is difficult to say how it will turn out; but as the taxes of the *Cutch* government are collected at *Lacpat*, and are farmed out for two lacs and thirty thousand *cowries* (Rs. 6,000) annually, there is, I believe, some objection to shipping merchandize by any other channel than *Cotrí*. I met, however, as I have said, five boats in one morning passing up the "*Mitra-nár*" to *Pállia*, and fell in with others passing down the river. The sailors on board one of them told me that they had come from a place on the *Guní*, twenty-four miles beyond *Wanga*, passing through numerous *bands*, all of which they assured me were burst. There are not, however, above ten or twelve of these boats in the whole of this branch,—a very unequal supply for a military expedition.

The *Corí* produces abundance of fish, and some of them of a very choice kind. Fresh-water fish were found in great numbers after the late inundation. Porpoises are seen even above *Lacpat*. The birds which frequent it are exceedingly numerous: flamingoes, cranes, pelicans, ducks, gulls, &c., with a long list of aquatic birds, which I never before met with, and whose names I have never heard. The pelican is a favourite food with the *Lohánas*, a tribe of *Hindús*, who are a very industrious race, and make up the greatest portion of the population of *Sinde*.

Except *Lacpat*, which is quite a modern town, there is no inhabited place on the banks of the *P'harrán* below *Alí band*, and the *Sindians* have a detachment at the first village, called *Raoma ca bázár*, five miles eastward of it. *Lacpat* is a place of considerable opulence, with a population of about six thousand souls; it is two and a-half miles in circumference, and surrounded by a strong wall with bastions at intervals. Its position is its greatest advantage, and the ruins of a very ancient city, called *Whágam Chaora-ca-gad*, proves that the former rulers of the country were not ignorant of this.* The inhabitants of *Lacpat* are principally merchants, for the

* See note J.

country is so complete a desert, that with the exception of a few gardens under its walls, there is no agriculture within four miles of the town.

The classic name of Indus sounds pleasing to the ear, but no beauty must be looked for in its eastern branch; as far as I have described, it runs through a dreary desert where there is not a single object to relieve the eye. From *Sindri* the hills of the *Pacham* are a little elevated above the horizon to the eastward; those of *Narrá*, in Cutch, may also be distinguished; and in a clear day, even *Lacpat* is visible. I have nowhere entered into a proof of the *Corí* having been at a former period the eastern mouth of the Indus, as it is a fact which has never been doubted, and is notorious in the history of the country. I cannot, however, conclude without mentioning the difficulties I have had to encounter in drawing up even this short memoir, from the singularly vague and unheard-of names which make their appearance in our best maps. I have inquired in vain for the branch of the Indus called *Luní*, and have not fallen in with a native who knew any of the branches of the river by that name. It is always applied to the river which flows through the *Júdpúr* territory, from *Ajmír* to the head of the *Párcar Runn*. The *Guní*, however, is known to them, and the *P'harrán* is said to be an offset from it. The name of *Luní* must have crept into our maps from a belief that the river which I have above alluded to, flowed into the sea by *Lacpat*,* or perhaps the *Corí* may have acquired the name from its vicinity to *Luna* on the *Banní* or grass lands north of Cutch.

PART II.

THE subject of the preceding Memoir had engaged much of my attention for some months subsequent to my visiting the Indus in March 1827, and I was naturally desirous of ascertaining whether or not the surmises which I had then thrown out were likely to be realized, or prove in any degree just. In August 1828, therefore, I prepared for a second visit to the

* See Memoir, Part II.

river, selecting that month because the floods in the Indus would have properly set in before I arrived, and the opportunity, on that account, would be very favourable for its examination. In the intermediate time, too, between March 1827 and August 1828, I had visited the whole northern frontier of the Bombay Presidency, from *Lacpat* to the mountain of *Abú*, and had minutely examined all the islands on the *Runn*, and the *Runn* itself at every point, as well on the borders of Guzerát as at *Párcar*, it appearing to me that it would be necessary to bring that singular tract of country clearly under review to comprehend fully the alterations which the Indus had undergone. The following sheets, therefore, will be found to contain a theory on the formation, filling, &c. of the *Runn*, with many novel opinions concerning it, which I have no where met with, and which are nevertheless founded upon those facts only which have come under my personal observation.

I sailed from *Lacpat* to *Allah-band* on the 9th of August, which, as may be remarked, is about the period when the south-westerly winds blow with the greatest violence, and I was, therefore, prepared to meet a greater body of water, and found the inland lake, before described, deeper by two feet, and the river increased in proportion. The channel through the *Allah-band* I found to be wider, with more of the west side washed away, and changed from a sloping declivity to a perpendicular bank, like the eastern shore. I sailed two miles up the river or channel which the flood of 1826 cut through *Allah-band*, and found the water gradually to decrease from two and a-half fathoms to as many feet, which I was informed was its depth as high up as *Chatítar*, above *Ali band*, and about twenty miles distant, where the water comes from the *Gúní* river, and to which the flat-bottomed boats could still ascend. This proved, at all events, that the *bands* have not been again thrown up in the *P'harrún* river, though I could glean no more positive information on this head than I have already given.

The grand embankment called *Arrore*, the bursting of which produced the changes before described, has been renewed, which will fully account for the decrease of water from the channel of the river between *Allah-band* and *Chatítar*. The greater distance which I ascended the river gave me a clearer view of the effects of the inundation of 1826; the banks of the channel which it cut through are of clay, and as they are perpendicular, and the river comes directly from the north, without any windings, I can

compare it to nothing so correctly as a canal, nor does its breadth, when a little way up, destroy the resemblance, being only sixty-six feet. I might have extended my journey higher up than I did, but after reaching the shallow water, and falling in with a boat belonging to the first Sindian village, *Raoma ca búzár*, I judged it more prudent to say for myself *non amplius ibis* than to encounter any of the subjects of the *Amírs*, I therefore retraced my steps by land to *Allah-band*.

The natural *band*, so called, is certainly the most singular effect of the earthquake of 1819. To the eye it does not appear more elevated in one place than another, and being covered with a saline soil, has the appearance of the *Runn* on all parts. I have been credibly informed that it extends much farther than I before stated, and that it can be traced eastward towards the *Pacham* island, a distance of twenty-four miles; westward as far as *Ghári*, a distance of eighteen miles, which would make its whole length upwards of fifty miles. That there must be some foundation for the extent of it eastward is clear; for there is an elevated mound, about a mile broad, on the road from *Luna* to *Raoma ca búzár*, sixteen miles south of that place, in the middle of the *Runn*, which is made the halting ground in wet weather, and which was not there prior to the earthquake of 1819. The elevation of *Allah-band* prevents rain-water settling on it and I am more inclined than ever to view it as a tract which might be very easily brought under cultivation. A little to the eastward of the mouth at *Allah-band*, I observed the remains of a *band* which had been thrown up by FATEH MUHAMMED, to prevent the water of the *Cáira-nallá* flooding the road between Cutch and Sindé,—one of the many memorials of that public-spirited and enterprising chief. It is, of course, now useless, for the road is not open during the monsoon between the two countries.

The grand alteration which had taken place in this variable country was the entire change of the sheet of water above *Sindrí* from fresh to salt. The charm which had drawn me here had therefore vanished, and the prospect of Cutch regaining once more the fertile *parganah* of *Saira* seemed more distant than ever: every thing, in fact, save the channel through *Allah-band* had reverted to the state it was in before the inundation of 1826, and the greater body of water, and its agitation by the winds, gave the whole the appearance of a great inland sea, bounding the horizon on all sides. The decayed tamarisk, and other stunted bushes, which for-

merly protruded their withered tops, and which had grown up in this land since it became one of desolation, had disappeared under the waves, and the sailors did not, as before, follow the windings of this once-fruitful river, but bent their course by the nearest line to their destination. The channel through *Allah-band*, however, did contain fresh water, which was, of course, the water of the Indus, and when the north-westerly winds set in, this may again make a slight impression on the *Sindri* lake, but never such a one as was brought about by the inundation of 1826.

The traffic between *Lacpat* and *Pállia*, as well as *Allah-band*, had not been discontinued, though necessarily less than last year, when the greater extent of navigable tract gave speculation a greater scope. I learnt that there were upwards of a dozen flat-bottomed boats belonging to *Raoma*, and also that the *Mitra-nár* or channel has been lately preferred, during the monsoon, for sending merchandize to *Sinde*, it being a better route than that by *Cotrí* to *Lah*, where, from the prevalence of mud, the camels slip, injure the goods, and are besides rendered useless ever after.* I ascertained from eye-witnesses, that even so late as January 1827 boats plied with merchandize from *Lacpat* as high up the river as *Amercote*,—a fact of which, on my first visit, I had many doubts.† *Amercote* has never been visited, I believe, by any European; the natives describe it as a small brick fort, with walls as low as *Lacpat*, sixty or seventy miles above *Raoma ca bázár*, and fourteen days' sail from *Lacpat*.‡ It is situated two *cós* eastward of a branch of the Indus called *Acra nallá* (*Nallá Sancrá?*), which is only filled during the floods of the river, so that I should infer the influx of water, in this branch of the Indus, to be chiefly from the arm that leaves the parent stream above *Bhacar*, and which separates *Sinde* from the desert extending to *Ajmír*.

The shallow part of the river is still without alteration, and it has struck me, that its continuation in this state proves forcibly that the ground about *Sindri* has been lowered; for, on the northern extremity, there is the high land of *Allah-band*, and on the southern, the shallow part of the river or

* See note K.

† I have just ascertained that this passage was open in May 1829, and that boats had passed from *Amercote* to *Lacpat*.

‡ See note L.

Sando. I was amused at an opinion which the natives entertain of the water collected below *Allah-band*, that it is too salt for fish, and more briny than the waters of *Simunder* or “the great ocean.” This is singular enough; but I am disposed to believe it, for they attribute it to the excessively salt soil of the *Runn*, on which this sheet of water lies; it is certain, that fish are not found in abundance, if at all, in the lake, though they frequent the river.

It really appears a most monstrous and short-sighted policy which leads the people of one nation to despoil another of such a length of inland navigation as this. Had Cutch possessed a prince of some patriotism when the first blow was struck in 1762, it would not have been suffering the disadvantages under which it now labours, and I can only account for an energetic reign, like that of *FAT’H MUHAMMED* (which commenced thirty years after *GHOLÁM SHÁH’s band* was thrown up) passing away without any exertion on his part to accomplish so desirable an object, from an anxiety to consolidate his usurped authority at home, and consequent dread of engaging in any enterprise which might lead his troops to too great a distance from Cutch.

The Runn.

But to the facts which I have collected relative to the *Runn* and the elucidation of that singular tract. In length, the *Runn* extends from the Indus to the western confines of Gujarát for a distance of full two hundred miles. In breadth, from the islands, it is about thirty-five miles, and taking into consideration its different belts, &c., it is by no means overrated at the enormous space of seven thousand square miles. The whole tract may be truly said to be a “*terra hospitibus ferox.*” Fresh water is never to be had any where but on its islands, and there it is scarce; it is without herbage on all parts, and vegetable life is only discernible in the shape of a tamarisk bush, which thrives by its suction of the rain water that falls near it. It is, I believe, a space without a counterpart on the globe; differing as widely from what is termed the sandy desert as it differs from the cultivated plain; neither does it resemble the *steppes* of Russia, but may justly be considered of a nature peculiar to itself. No where is that singular phenomenon the *mirage* or *siráb* of the desert, or, as the natives most aptly term it, *dukhán* (smoke or vapour), seen to greater advantage than on the *Runn*. The smallest

shrubs on it have at a distance the appearance of a forest ; and, on a nearer approach, assume sometimes that of ships in full sail, at others that of breakers on a rock. In one instance, I observed a cluster of bushes, which looked like a pier with tall-masted vessels lying close up to it, and on approaching, not a bank was near the shrubs to account for the deception. From it, too, the hills of Cutch seem more lofty, and to have merged into the clouds, their bases being obscured by vapour. The wild ass, or *khar gadá*, is the only inhabitant of this desolate region. These animals roam about in flocks, as the Scripture says, "scorning the multitude of the city, and make the wilderness and barren lands their dwellings." They are not much larger than the common ass, but at a short distance they sometimes appear as large as elephants, from the deception of vision. As long as the sun shines the whole surrounding space of the *Runn* resembles a vast expanse of water, the appearance it commonly assumes, and which is only to be distinguished from real water by those who are long habituated to such optical delusions. When the sun is not shining the *Runn* appears higher at a distance, but this has been remarked of the sea and other extensive sheets of water, and is of course to be accounted for on the same principle. The natives of Cutch, Muhammedans as well as Hindús, believe this *Runn* formerly to have been a sea, and have a tradition, which is in the mouth of every one, that a Hindú saint, named DHÚRAMANÁT'HA, a *Jogi* * of *Denodard*, underwent penance (*tapasyá*), by standing on his head with *supára* leaves under it, on the top of *Denodard* hill (which overlooks the *Runn*) for a period of twelve years. At that time he resumed his proper position, and God became visible to him, when a convulsion of nature took place, and the hill on which he stood split in two, the sea that lay northward of him (which is the present *Runn*) dried up, and the ships which then navigated it were wrecked and its harbours destroyed, with other miraculous and wonderful events. There is no race of people who have such recourse to supernatural agency in their history as the natives of India ; and to those who have been accustomed to inquire into it, the above tale will appear but a graft of one of their numerous versions of some real event which has at one time or other actually happened in the country, and which has travelled down to

* See note M.

posterity in its present shape. Considering the frequent occurrence of earthquakes in Cutch, and the volcanic appearance of many of its hills, it does not seem otherwise than reasonable to have recourse to one of these concussions of nature to account for the foundation of such a tradition, and though it would be difficult to determine the precise period when it occurred, I do not despair of being able to prove from the present state of the country, that such an event did take place at some time or other.

I conceive the *Runn* between Cutch and Sind to have been once very different from its present state, and my object will be to prove the two following propositions :—

First, That Cutch has in all probability been separated from Sind by an influx of the sea caused by an earthquake, and that the *Runn* which now intervenes between the countries has been, *without doubt*, at some time or other an inland navigable sea.

Second, That the present state of the *Runn*, which is neither that of a navigable sea, or one at all, has been brought about by a chain of causes quite in accordance with the laws of nature.

A reference to the map of the *Runn** and its banks, illustrates the shape of this tract, and is compiled from survey and personal observation. The peculiar conformation of the north-eastern part of Cutch at *Bhailá* should be observed. It will be seen that it extends itself till it terminates abruptly in a chain of hills overhanging the *Runn*, and which attain in some places a perpendicular height of nearly three hundred feet. The islands of *Carír* and *Pacham* on the *Runn* lie due west of this range, and are not only composed of the same sort of iron-stone as these hills, but have similar ranges running through their northern extremities which terminate also, particularly *Carír*, in an abrupt and bluff outline towards the north, the *Runn* approaching close under them. *Carír* is separated from Cutch by a belt of *Runn* about five miles broad, and that island again from the *Pacham* by another belt of sixteen miles, and of all other places of the *Runn* these two are most frequently under water. These circumstances, therefore, with the lineal position of the hills, afford considerable proof that these three could have been but one range of hills, and

* It has not been considered necessary to annex this Map, since it will be shortly published by Mr. JOHN ARROWSMITH, in his new Atlas, under Lieut. BURNES's directions.

that, by whatever agency separated, water must have had great effect in accomplishing the change, since the northern sides of all, which is the direction in which the body of water would come, present precipitous head-lands such as fringe the borders of oceans, and great collections of water.

To the westward of the *Pacham* there are a few other islets on the *Runn*, but they are low and sandy, without any such indications as those above described, and have something the appearance of sand-banks. To the south of the *Pacham* island there is a tract of grass land, called *Banní*, of a greater elevation than the *Runn*, and producing abundance of pasture, but not sufficiently elevated to yield grain, and of which more will be said hereafter; it is necessary to mention it here as a connecting link between the *Runn* islands and the main land of Cutch. This tract does not extend so far eastward as *Carír*; but south of that island there are innumerable small islets in the *Runn*, the largest of which is *Gangta*, about eight or ten miles in circumference, and on all of which there are rocky hills or elevated plains, or, if the surface of any of them be flat, it is invariably found to be hard and stony, and impregnated with iron, like those on the greater islands. Here again is another connecting link which would join *Carír* to that part of Cutch called *Wágar*; and it is surely not too much, after these facts, to suppose that Cutch, and the islands north of it, were once joined together.

Again, the district of *Párcar*, which lies nearly due north of the *Bhailá* range of hills above-mentioned, is distinguished from the neighbouring countries by extending farther into the *Runn*, and making greater approaches to Cutch. These hills are separated by a low tract of *Runn*, upwards of thirty miles in breadth, without a tree or bush intervening, so that they are distinctly visible from one another in a clear day, and it was on contemplating them that I first formed the opinion of Sinde and Cutch having been united. *Párcar* is a very disturbed state, and I have been prevented on that account from visiting it, and specimens of its hills would be little satisfactory. Nor am I able to say much of the country, called *Tharr*, lying between *Párcar* and the Indus. I have visited *Bállyarí*, and found the country one succession of low sand-hills, which I am told is the general feature throughout, and I do not conceive therefore that because there is no counterpart to the hills of *Pacham* and *Carír* on the Sinde side, it in any way affects the belief that the countries were united, as it is more

than probable that the tract which did intervene was low, and not unlike the *Tharr* itself. *Párcar* too, I learn, is peninsulated, which may be accounted for by the force of the waters that overflowed the *Runn* at some period being checked in their progress by its hills. I am inclined, therefore, to believe that the *Runn* of Cutch was formed by an influx of water which disunited the hills of *Bhailá* and *Párcar*, consequent on an earthquake.

But to complete the proof on this head, I take it for granted, that Cutch has been at one time or other united to *Sinde*. Such being the case, the *Indus* would flow, as it now does, on the western side between it and *Sinde* proper, and the river *Bannáss* between it and *Guzerat*, and which would leave no doubt that the waters of the latter river escaped to the head of the gulf of Cutch in a prolongation of their present course. But besides these two rivers, we have the *Luní* river flowing from the mountains of *Ajmír* into the north-eastern corner of the *Runn* at *Párcar*, and it is doubtful what course its waters would pursue, after reaching so low as the island in the *Runn*, called *Narrá báte*. I am inclined to believe that their more probable course would be towards the *Indus*, across the present *Runn*, in a direction nearly parallel to that great river, and with which the *Párcar* hills may have prevented it from effecting a junction higher up, so that they would enter the sea by *Lacpat*, and not along with the waters of the *Bannáss*, by the head of the Gulph of Cutch. Some of our maps have given a dotted line, representing the course of the *Luní* river, as I have now stated, but it must be purely supposition, as there is no channel now discoverable any where throughout it, and I speak from personal observation. That distinguished geographer, Major *RENNELL*, was greatly puzzled in his memoir to assign a proper course to this river, which he calls the *Paddar* and *Cággár*, names now unknown, and after saying that it is possible these rivers may discharge themselves into the sea by one or more openings through Cutch, he surmises that they may be lost in the sand. This country was quite unknown when *RENNELL* wrote, and I believe I am the first European who ever crossed the grand *Runn* to *Báallyarí*. In this journey, which was performed in February 1827, I had ocular demonstration of the humidity of a part of the intervening *Runn*, which the natives informed me was caused by a quantity of water that had been blown from the vicinity of *Párcar*,—a corroborative fact that the course of the *Luní* river was, in all probability, as I have assigned it.

Water, it is known, forces itself easily into a tract where there is a channel for it to run, and having established the course of these three rivers, we can believe that as a greater column of rain-water flowing down them would widen the channel, so would a greater influx of sea-water forcing itself up them, readily overflow the low tract which bordered on them. The junction of such a body of water from the east and the west, or from the *Indus* and *Luní* on one side, and *Banná* on the other, would speedily form an inland lake or sea, such as the present *Runn* has, in my opinion, been. But the earthquake of 1819 was attended with circumstances, which would supersede the necessity of making these rivers overflow their banks. It made numerous fissures in the *Runn* in different places, and I have it from the most undoubted authority of eye-witnesses, that immense quantities of black muddy water were ejected from these openings for a period of three days, that the water bubbled out of the wells of the *Banní*, till it overwhelmed the country in some places with six, seven, and even ten feet of water, and that the shepherds with difficulty saved themselves and their flocks. If in our own times such an extraordinary increase of water has taken place on the *Runn*, it renders my view of the subject, as being only a recurrence of former events not very improbable.

The natives, however, carry their traditions of the *Runn* having been navigable into greater minuteness than a vague account of ships having navigated it, and point out to this day the positions of the different harbours on its banks. *Neroná*, a village twenty miles N.N.W. of *Bhúj*, and near the *Runn*, is said to have been a sea-port. In the poesy of the country it is described in these words—" *Neroná naggártir, jadhi Gúntri Chitráno*," or, in other words, that *Neroná* was a town and a sea-port (*tir*) when *Gúntri*, the ancient capital of Cutch, flourished in the *Chitráno*, an inland district so called.* At *Chári*, a small village ten miles distant from *Gúntri*, and situated on a river, there are traditions also of a harbour. The *Pacham* people have similar traditions of like places, and of boats being wrecked on the hills of that island; also that there was a considerable harbour near them, called *Dórat Doh* or *Dóhí*, the site of which I have ascertained to be on the northern side of the *Banní*, westward of *Caorá*, and not far from a place

* See note N.

called *Phángwarró*, which is also believed to have been a sea-port. *Bitáro*, a small place on the high road to *Sinde*, between *Luna* and *Raoma ca bázár*, was likewise one; but there is no end to the list. The traditions too, are equally strong, of their existence on the *Sinde* side. *Bállyári* and *Vingar* are named, and also a ruined city, called *Vigo-gad*, about eight miles from the *Indus*, which is said to have been the principal sea-port, and as large a place as *Bhúj*. This sea was called by the natives "*Kiln*," a name from which I can draw no inference, but I should imagine it is impossible for any one to discredit the testimony of a whole body of people, who, without communication with each other, informed me of these traditions at different periods.

But if what is stated above be only sufficient to shew that the *Runn* has been under water, I have other facts to prove it navigable. During the time that the water was ejected by the earthquake, numerous pieces of iron and ship-nails were thrown up at *Phángwarró*, the port before mentioned; and similar pieces have been since found in the same neighbourhood on digging tanks. Since 1819, the natives frequently fall in with them; and as those who had seen them assured me they were not implements of agriculture, but clearly the iron used in boats, and found only near the *Runn*, more incontrovertible proof could hardly be wished for on any subject. Nor do I give this important fact from report, for I had it from respectable men at *Narrá*, who were eye-witnesses, and who also assured me that they had never discovered any thing of the kind before the earthquake, which shews how much the earth must have been disturbed.

Moreover, the whole northern face of *Cutch*, from *Lacpat* to *Bhailá*, with the exception of a few miles here and there, presents either a rocky or elevated bank, much of the same description as that of *Carír* before given, though lower. Between *Narrá* and *Lacpat*, in particular, the rocks terminate abruptly, and do in reality form what would be called bays, cliffs, headlands, &c., if the water washed under them; and which, I presume, indicate the extent to which the water approached when the tract was first overflowed. Where the immediate vicinity of the *Runn* is not of this description, there are hills not far inland, and where there are not, the *Runn* stretches in, exactly as water would do when not resisted. In *Wágar* the northern promontory of hills, which lies opposite *Párcar*, has been almost cut off from the main land by the absence of hills, and a belt of

Runn passes nearly across from *Játtawár* to *Fatihgad*; indeed, I question if at some period this may not have been detached altogether from *Wágar*, and rejoined by a decrease or recession of the water. Its present position is almost that of an island, and I cannot help thinking that this goes very far to elucidate the causes which may have detached Cutch from *Sinde*, and that the tract which lay once between these countries was of this description, low, and without hills. Wherever there is an island or piece of dry land in the *Runn*, it is invariably rocky and hilly: now these are precisely the parts which it would be most difficult to have swept away, and which consequently remain, as, I believe, memorials of a once more hospitable region than that by which they are now environed.

Between *Gujarat* and Cutch the *Runn* is very narrow. At *Addisr* it is only a mile and a-half broad, and at *Vowá*, where the coast is more depressed than at that place, it is but eight miles wide. This channel, however, cannot be said to separate the one country from the other, as the island of *Chorár* intervenes. This is a low tract of land, with but few rising grounds, and on which there are now many villages; it has no doubt been under water, and involved in the same catastrophe as the *Runn* at a former period. This is proved by a deposit of shells and marine matter found on the northern side of the island, and which is called by Europeans *Ducarwár* marble. I understand it is a carbonate of lime, with other substances mixed; it has a red and yellow petrified appearance, and is susceptible of a tolerably good polish.

In fact, as both the grand openings into the *Runn* from the Gulf of Cutch and eastern mouth of the *Indus* give access to the sea-water at the present day, during the south-westerly winds, and as the bodies of water so impelled up meet in the *Runn*, should there be heavy rain to moisten it, and assist the winds (as afterwards explained), I look upon this conclusion to be obvious, that between Cutch and *Sinde*, at some period or other, there intervened an inland sea, which was navigable, and that there are circumstances in the present appearance and state of the country, which do not render it improbable that this inland sea was formed by an influx of water from the ocean consequent on some convulsion of nature.*

* See note O.

Presuming, therefore, that the *Runn* has once been a navigable sea, I shall now enter on its present state, which is neither that of a navigable sea, *nor one at all*. Its being denominated a marsh, has, in my opinion, given rise to many erroneous impressions concerning it. It has none of the characteristics of one; it is not covered or saturated with water but at certain periods; it has neither weeds nor grass in its bed, which, instead of being slimy, is hard, dry, and sandy, of such a consistency as never gives way, unless a long continuance of water on any individual spot have converted it into clay, which is rare, nor is it otherwise fenny or swampy. It is in reality but the dried-up bottom of an extensive inland sea, which, from having once been overwhelmed with water, more readily receives what flows into it from being lower than other parts of the country.

The grand *Runn* is that part which lies between *Sinde* and the islands of *Pacham* and *Carír*, the other parts being but ramifications of it; and the natives, in speaking of the navigable sea, have always that portion of it in view. The places which I have before described as its sea-ports in *Cutch*, *Chárí* and *Neroná*, are, it is to be observed, not on the main *Runn*, but on the narrow branch which separates it from the *Banní*. Those, on the other hand, situated on the *Banní* itself, as *Dórut Dóh*, *Phángwarro*, &c., I take to have been on the banks of the great *Runn*.

The *Banní* at present is not affected by the inroad of sea-water, but simply by rain, and never has, as far as I can judge and learn, formed any part of the *Runn*. In appearance it is a low humid tract, but nevertheless higher than the level of the *Runn*, and never flooded; indeed, many parts of it are inhabited even in the rainy season, there being a stripe of elevated land down the centre, which favours the tradition that prevails of its having had sea-ports. The existence of such a low tract near what I am trying to demonstrate has been inundated by the sea, may excite remark; but its protection from such an inroad of water, originated, no doubt, in its being removed at some distance from the course of the overflow of the waters, and situated to the south of what is actually their direction at present. It does not seem improbable, therefore, that the *Banní* has encroached on the *Runn* like a sand-bank in the ocean, and has extended itself to its present bulk. Rivers are known to be choaked up by an accumulation of sand, which will gather round any focus, such as the hull of a sunken vessel; and I conceive that the *Banní* may have had such an effect

in changing the *Runn* in its immediate vicinity from a navigable to a shallow sea. But the belt of *Runn* between the *Banní* and Cutch proves this in a great degree to be fact; for it is not, as other parts of the *Runn*, entirely of sand, but slightly overgrown with verdure, particularly between *Lúndí* and *Narrá*, and which will no doubt change in time to *Banní*, and join on to Cutch. There are also no less than twelve rivers (small ones certainly), running into the belt of *Runn*, and it is to be supposed that they will deposit matter, and in time entirely fill up this portion of *Runn*.

These remarks only apply to a small part of the *Runn*. It is apparent, in all the southern coast of Cutch, that the sea has receded, and it seems to be generally acknowledged, that there is a depression of the level of the sea throughout the globe, though there are a few places, I am aware, in which this would not be true. In addition to this recession, which would also withdraw the sea from the *Runn*, it is to be observed that the *Indus*, *Luní*, and *Bannáss*, would deposit sand; and the monsoon winds, which blow up the water from the gulf and creek at *Lacpat*, would likewise accumulate matter, which in process of time would cause a redundancy of sand, and convert the *Runn* into something like a sand-bank. That the *Runn* is above the level of the sea at the present time is obvious, for it requires strong winds to flood it.

The saltness of the *Runn* is a subject not divested of difficulty. I conceive it to have originated, in the first place, from the influx of sea-water, and to be aided by the saline particles which the different rivers bring down into it. All the Cutch rivers flow from a chain of mountains, which give evident proofs of being in progress of decomposition; a state which at all times generates salt; most of these rivers, indeed, are salt water, and this is also the case with half the wells in the country. The very fact of their flowing in the direction which they do, northerly, into the *Runn*, proves that it must have been once an inland sea. Some African traveller has observed, that the water of all rivers running into an inland sea, without an outlet, is invariably salt; and the *Runn*, since winds only affect it, may in some degree be considered a lake. So salt is the *Runn*, that it is often encrusted with it an inch deep, the water having been evaporated by the sun, and I have even picked up lumps of salt as large as a man's fist, beautifully crystallized. The whole surrounding soil partakes so much of salt, that the wells which are dug to the level of the *Runn*, invariably yield salt

water, while nearer the surface fresh is procurable,—the remains of rain water, of course,—but even that in time becomes salt, the *Runn*, as it were, contaminating or corrupting it.

But there is one portion of the *Runn*, which does not present such inhospitable and salt features as I have been now describing : that portion of it at the mouth of the *Luní*, where the waters of the river are fresh, and the people cultivate grain with advantage ; so soon, however, as this river reaches a little lower down, and mingles with the *Runn*, it is no longer accompanied by green and fertile fields, but dissipates its fatness in the dreary desert, and, saturating the *Runn*, renders it dangerous to travellers. The tract of *Saira* was no doubt of this description, and formed, on the other hand, by the alluvial deposit of the *Indus*, but which, as I have before shewn, has disappeared since 1762. It is a singular circumstance, that that portion of the *Runn*, which is the only part that has been well established to have been cultivated, should now be under salt water.

The *Runn* of Cutch is much more easily flooded when local rain has moistened it ; and I have observed that strong winds, succeeding rain, invariably cover it deeply with water. When well saturated, it becomes like a sheet of blotting paper, and the water blown in upon it readily spreads on all sides, so that the rain, wind, and sea, equally contribute to flood it ; and its dryness at one time, and shallowness at others, is easily accounted for, presenting, as has been shewn in the above line of argument, nothing at variance with hydrostatical principles.

That the natives of Cutch should attribute such a wonderful change in a part of their country to the influence of a man so holy in their estimation, as the *Pir*, or *Jógí*, of *Denódar*, seems to be by no means wonderful. The *Jógís* are a philanthropic, hospitable body of men, who are much respected in the country, and who allow no one of any persuasion to leave their door hungry. They are blessed with plenty, and like the monks of Europe formerly, become the depositaries of the history and traditions of the country. Accordingly, these people have the most detailed account of DHURAMANÁT'HA'S deeds ; and it may be this minute preservation of them by his followers which has given rise to the tradition, that these alterations of the *Runn* were brought about by the founder of the *Denódar Jógís*. A credulous people, like the natives of India, are ever ready to believe any tale, absurd as it may be, ushered in as the offspring of one of their gods or saints.

In proof of this, they have also a story, that the ancestors of the present RÁOS of Cutch were once a pennyless class of shepherds, who, coming from *Sámí* (Tatta) in Sinde, fed their flocks in Cutch, and, being patronised by the *Denódar Jógis*, were raised to be rulers of the country. Now the substance of this is true,—that the *Jhárejá* family of the RÁOS of Cutch *did* come from Tatta, in Sinde, and did tend herds of cattle in Cutch,—although they were certainly not raised to their present elevation by so peaceable a method as the simple intercession of a Hindú saint. Such, however, is the alteration which a story undergoes in the course of four hundred years.

The point most difficult to determine is the period at which these changes in the *Runn* took place. The *Denódar Jógis* are said to have been only coeval with the RÁOS of Cutch, and this would bring it down to so late a period as the fourteenth century, or, if we take the time the first *Jhárejás* came into the country, perhaps two hundred years sooner; yet the Muhammedans had sway over India even before this last period, and their historians are silent as to any great convulsion having taken place. ABUL FAZL, the author of the *A'yín Acbarí*, who wrote in the Emperor ACBAR's reign, which commenced but in 1556, makes Cutch so much more extensive in its dimensions than it really is, at whatever standard we take the *cós* that it might have been joined to Sinde in his time; but then he mentions that part of the *Runn*, which borders on Cattywár (*Jhálláwár*) as being famous for the salt it produced. Cutch was a country little known to the Muhammedan Emperors of Hindústán,* and ABUL FAZL may have derived the account which he gives of it from old archives in the possession of his master, or from reports which may have travelled down from the time of MAHMÚD of *Ghazní*, who first visited these parts about eight hundred years ago, and in whose time the countries may have been united,—but these are mere conjectures. There are several cities about *Abú*, and also in the western parts of *Málwa*, as mentioned at page 325 of the Second Appendix to Sir JOHN MALCOLM's "Memoir of Central India," which are stated to have been overwhelmed at a remote period by an earthquake. Some believe this event to have occurred only three hundred years ago, and the convulsion which overthrew them, may have affected the *Runn* of Cutch.

(Signed) ALEX. BURNES.

* See note P.

NOTES.

(A.) DR. VINCENT, who has written on the expedition of ALEXANDER the GREAT, believes that he extended his journey from the Indus into Cutch, which was the "*ultima Thule*" of the Greeks; but the learned doctor does not appear to be borne out in this conjecture by any of the historians of antiquity. It is to be recollected, that it was not in accordance with ALEXANDER's own wishes to return from India, and that it was forced on him by the mutiny of his army on the Hyphasis, on account of the distance he was proceeding from their native country, which his oratory, pointed as it was, was unable to subdue; so that, as the historian says, he commanded them to return. His memorable speech, on descending the Indus from *Páttálá* (the modern *Tatta*) to the sea, which took place before his assumed entry into Cutch, confirms the fact, that all his movements after that period were towards home, though they could not be called retrograde. He tells his soldiers "that they at last were come to the *end* of their toils, which they had so earnestly desired, and that nothing *now* could oppose their valour nor add to their glory,—that without fighting any *more*, or spilling of blood, they were masters of the universe,—that their exploits had the *same* boundaries with nature;" and ROLLIN, who must be allowed to have attentively studied the text, says further, that "finding he had extended his conquests to the extremities of the earth *on that side*, he imagined he had completed his mighty design." How can it be reconciled, therefore, that ALEXANDER persisted in a three days' journey, with even part of his soldiers, after he had told them that they had reached the *end* of their toils, and their exploits were *now* bounded by nature, and that their conquests had reached the extremity of the earth, when every step he afterwards took would serve to belie his own oration, and to expose, for aught he knew, his troops to *new* fighting and spilling of blood?—for as Cutch is by nature a strong country, and the disposition of its people has been always considered warlike, the inhabitants were not likely to be less so, at that time, than their northern neighbours, the *Malli*, *Catheræ*, *Oxydracæ*, &c.

ALEXANDER, however, made a second voyage down the other branch of the Indus below *Páttálá*; and though we have the names of the *Sindomanni* and *Páttáláns*, or the inhabitants of Upper and Lower Sinde, yet the natives of Cutch are not mentioned,—a very unlikely omission, considering that, if that country had been entered, it was the very termination of the expedition,—a circumstance, above all others, likely to add to its notoriety. But the professed object of ALEXANDER, in sailing down the eastern branch of the Indus, was to seek for bays and creeks on the sea-coast, and to explore which of the two branches of the Indus would afford the greatest facilities for the passage of his fleet, for ARRIAN says, "he had a vast ambition of sailing all through the sea from India to Persia, to prove that the Indian Gulf had a communication with the Persian." No allusion is made to the conqueror's desire to penetrate farther into India, and the historian goes on to state that "when near the mouth of the river he came to a lake formed either by the river spreading wide over a flat country, or by additional streams flowing in from the adjacent parts, and making it appear like a bay in the sea," and here it was

he left LEONATUS, and "sailed with some *biremes* to a creek which his pilots directed him to, and through which he sailed into the ocean, and found the passage much easier and safer than the other." From this circumstance he landed with a party of horse, and travelled three days along the coast to try if he could find bays or creeks to secure his fleet from storms, causing, as ARRIAN expressly says, "*wells to be dug to supply his navy with water.*" Surely, then, he must have travelled westward in the direction his fleet was to sail; or of what utility would wells dug to the eastward have been to his navy, or bays and creeks in that direction? ALEXANDER dreaded the dangers his fleet would have to encounter, but was not so ignorant of the direction in which they were to sail as to make such a mistake as to travel and dig wells to the eastward;—indeed, ARRIAN says, in the 21st chapter of his 6th Book, that when ALEXANDER had proceeded as far westward on his return as the river *Arabius*, he turned towards the ocean "*that he might cause more wells to be dug for his fleet,*" and caused "LEONATUS to tarry there till the fleet should sail round these coasts," from which second anxiety to secure water for his fleet it may be surely inferred, that his first journey along the coast, as well as his route home, were in one direction.

It has been surmised that ALEXANDER would have had a most difficult march through the delta of the Indus, which was the direction of this route; but it is stated that when he first resolved to sail down to the ocean, he sent LEONATUS, with a thousand horse and about eight thousand heavy and light-armed foot, *through* the island of *Páttálá*, "that they might meet the fleet on the other side;" and as LEONATUS encountered no difficulty in passing *through*, it is not likely that ALEXANDER would experience any. Besides, he had his vessels with him, and as his march would be along the beach he could easily transport his cavalry across any rivers which intervened.

To account for ALEXANDER's digging wells, Dr. VINCENT has stated, (upon what authority I am not aware), but erroneously, that that part of Cutch which ALEXANDER would pass through is a desert, and that our later travellers mention the wells which make it passable, and that it was the route of the caravans from Guzerat to the Indus. From personal observation and inspection of this tract, I have to state, that it is by far the richest part of Cutch, and, instead of being a desert, is highly cultivated and called the *Abrássa*; besides, it was never the route of the caravans to the Indus, which led through the little desert north of the *Runn* of Cutch by *Párcar*, where the wells Dr. VINCENT alludes to are to be found, and which he confuses with Cutch. That the above route has been always the frequented one between Guzerat and Sindé, must be obvious; for in selecting it the caravans avoided the *Runn* and the formidable mouths of the Indus, which, by pursuing the road through Cutch, they would encounter very low down, and find exceedingly difficult to cross.

But allowing ALEXANDER to have turned eastward, after passing down the eastern branch of the Indus below *Páttálá*, he would still be in Sindé, even if he marched three days eastward; for the *Lacpat* branch of the Indus has no communication with the others *but during the floods* of the Indus; and the grand *embouchure* for the waters of the most eastern of the two branches below Tatta is *Wányáni*, which lies between the

most western and *Lacpat* or eastern branch, and is in all probability the one through which ALEXANDER passed to the ocean the second time, and through which he intended his fleet to sail. The description given of this branch is quite characteristic of many of the mouths of the Indus, as being at its mouth like a "bay in the sea," for some of the rivers lose themselves in fens and swamps, sometimes forming lakes which communicate with the sea by small openings. I take it for granted that ALEXANDER never sailed down the *Pharrán* or *Córi* branch of the Indus, on which the preceding memoir treats; for it leaves the parent stream as high up as *Bhacar*, one hundred and seventy miles and upwards from the sea. It is not even mentioned by ARRIAN, and may be an excrescence from the main trunk of a later date than the days of the Greeks, and brought about, perhaps, like the inundation of November 1826, by the bursting of a *band*, such as *Arróre*. Nor has the *Lacpat* branch any resemblance to the one described by ARRIAN, for it widens greatly at its mouth, and has no small opening to the sea, and had ALEXANDER passed through the *Wányání* branch, he must have extended his voyage out to sea before he could reach Cutch; for the entrance to the two grand branches on which *Sháhbander* and *Bí* are situated, is not visible from Cutch, and I speak on this point from personal observation.

There is one other fact to which I shall allude before quitting this interesting subject. ARRIAN mentions a nation on the Indus, called "*Sangada* or *Saranga*," and D'ANVILLE has supposed the country of the *Sangada* to be the same as the modern "*Sangada*, or country of the *Sangarians*," whose modern capital, according to RENNELL, is *Noanagar*, on the south coast of the gulf of Cutch, and who, further coinciding with D'ANVILLE, conceives that the "*Sangarians* must have first removed from the western to the eastern side of the Indus, and afterwards must have also crossed the gulf of Cutch." In the province of Cutch, and about thirty miles eastward of the *Phurrán* river there is a town on the sea-coast, called *Jacow*, inhabited chiefly by a race of people, called *Sungars*, who have a well-founded tradition that they came from the west, and in ALEXANDER's time they were perhaps westward of the Indus, and the same people whom NEARCHUS mentions to have encountered the Macedonian hero on his road to *Gedrosia*, between the rivers *Indus* and *Arabius*.

That ALEXANDER's fleet never saw Cutch is clear, for it must have sailed out of the grand western branch of the Indus, and NEARCHUS' description of the harbour of *Crocalu*, near the port of ALEXANDER, which he came to when only one hundred and fifty stadia from the place of his departure, agrees exactly, it has been said, with *Caráchi*. If the admiral had sailed out of the eastern branch, he must have passed along the whole delta, which would give an additional distance of eighteen hundred stadia, and this he never did; yet ALEXANDER's reason for sending his fleet by the branch which he had found the safest and best, is no where explained by ARRIAN.

The river Indus is so constantly subject to alterations, in particular towards the sea, that it must ever be fruitless to attempt the identification of any of its branches with what they appeared to the Greeks, unless in general features; and any one may, without fear of contradiction or comment, fix on the opening to the sea of any of its numerous

outlets, as the bay visited by ALEXANDER the GREAT, and from which he is said by some to have passed into Cutch.

Judging from ALEXANDER's love of glory, it may almost be believed that he had no desire to be acquainted with Cutch, since his ambition could not be gratified by entering where he knew his army would not follow; and it is more than probable, therefore, that the Indus and the ocean were the boundaries of the Great ALEXANDER's conquests, and, as he wished his soldiers to believe, the boundaries of nature; for since he could prosecute his expedition no farther, it was but in unison with the colossal altars and camp he had caused to be erected on the banks of the *Hyphasis*, as monuments of his glory, and the extent of his journey, that he should impress upon his followers, when about to return home, that they had reached the extremities of the earth, and were masters of the universe; and that their leader had rivalled the feats of HERCULES and BACCHUS.

(B.) This conflict, so memorable in the annals of Cutch, was fought in the reign of RÁO GÓRE, at a small village of the name of *Jhárrá*, which is situated about fifteen miles from Lacpat. I have heard various accounts of it from eye-witnesses, all of whom describe it as a dreadful scene of carnage. The Cutch people took their stand upon a rocky hill, and butchered their own families to prevent their falling into the hands of the Sindians. The victory was decisive on neither side: the whole *Jhárejá* chiefs of Cutch, and many mercenary troops, were collected together by the RÁO; the Sindians drove them from their position, but gained no decided advantage, and returned almost immediately to Sinde to throw up the *bands*. The revenue derived by government from the irrigated tract of land they thus destroyed was upwards of eight lacs of *córies*, or two lacs of *rúpís* annually. GHOLÁM SHÁH's objects in invading Cutch seem to have been to annex it to his dominions, and also to procure the sister of the RÁO in marriage, in neither of which was he successful. In his designs he was assisted by a disgraced minister, PÚNJA SET'H, a *Lóháná*, who was afterwards poisoned for his treachery.

(C.) BLACKSTONE describes this law "as a system of rules deducible by natural reason, and established by universal consent among the civilized inhabitants of the world," and says that "it is founded upon this principle, that different nations ought in time of peace to do one another all the good they can; and in time of war as little harm as possible, without prejudice to their own real interests."—BLACK. *Com.*, book iv. p. 66.

(D.) There is a temple at *Cótásir*, built close on the water's edge, and is a place of some celebrity, at which a "*cháp*,"* or stamp, is burned on the arms of such pilgrims as

* A pair of these stamps are in the Museum of the Royal Asiatic Society, to which they were presented by Lieut.-Colonel JAMES TOD.

visit it ; but it is not allowable for any one to receive this honour who has not made a pilgrimage to *Hingláj*, a holy place on the coast of *Mecrán*, two hundred and fifty *cós* distant from *Cótásir* ; but this journey is generally confined to the tribe of *Goseins*. *Cótásir* is to Cutch what the temple of *Dwárca* is to *Cattywár*, but of less general note than that place, though it is considered necessary for Hindús to visit both before they are entitled to certain honours, from having made “ *tírat* ” to all the temples in Western India.

(E.) The coast of *Sinde* is distinctly visible from *Cótásir*, and a pagoda called *Ráo-Cánoje-ca-déra*, bears W.N.W., and is said to be nine miles distant. There is a camel-road from the interior of *Sinde* to a place called *Cardó*, across the river, and nearly due north of *Cótásir*, to which rice and other commodities are frequently brought down and shipped.

(F.) Great numbers of horses are annually brought down from these countries to Cutch. The merchants arrive with them about the beginning of December, and again return to their country about April. They are chiefly intended for the Madras cavalry, and are shipped at *Mandavie* for the Malabar coast. Where Arab horses are procurable, they are considered inferior from their thick, bull necks, and want of symmetry. Greyhounds, carpets, and fruit, such as apples, pears, grapes, apricots, &c., are regularly brought down by the same opportunity, and have a ready sale in Cutch. The dogs seldom live longer than a year, the country appearing to disagree with them.

(G.) The flies, or rather mosquitoes, are so numerous on this part of the *Runn*, that it is almost impossible to breathe without swallowing them ; though they do not bite, it is with difficulty a horse can be forced on through them. The moisture of the *Runn* generates these insects ; and in the monsoon, when the humidity is great in the *Banní*, the natives can hardly exist on account of them, and betake themselves to Cutch. I have always observed them most numerous when the soil is muddy and encrusted with salt.

(H.) “ *Sinde* is open to attack from India by way of *Multán*, *Guzerat*, and *Cutch* ; that by *Guzerat* passes by *Nagar Párcar*, crosses the *Rejestán*, whilst *Cutch* borders on *Sinde*, which may be entered either by crossing the river, or by sailing up the easternmost branch of the *Indus*.”—CROW MSS. A light division might be crossed at *Lacpat* to *Cótrí*, and proceed by *Lah*, *Vere*, *Himiut-Rarí Mirpur*, and *Banná*, to *Hyderábád* ; but for the first four marches water is very scarce, the country being little better than *Runn*. If we entered the country by *Párcar*, the route would lead through a desert of sand-hills, and the march would be very irksome ; but great part of this journey might be avoided by throwing the army into *Sinde*, by the route leading directly north of *Bhúj* across the *Pacham* island and *Runn* to *Bállyarí*, which is open by December, and from thence striking north-westerly to *Hyderábád*, by the route of *Muhammed*

Khán ca tánda, which is seventy-seven *cós*, or, perhaps, two hundred miles from *Bállyari*. I have passed over this route.

Crow says, "The most eligible place for an equipment to land in Sindé during the north-east monsoon is *Guissary*, a place about ten miles to the south-east of *Curachee*, at the mouth of a creek opening from the sea. *Curachee* itself is a sea-port to the west of the Indus, and no vessels could batter it from the sea, for they are obliged to lie at a distance of at least three miles from it; but their guns could cover the landing of the troops abreast of the place of anchorage; vessels of a large draft of water could anchor outside of *Curachee-bar*, and at a moderate distance from the creek. The landing at *Guissary* is convenient enough at high tide for good-sized boats, and a couple of guns might keep the shore perfectly clear. The road to *Curachee* is level, from thence to *Tatta* plain and good for the transport of guns and stores, and in favourable seasons is covered with verdure. From *Tatta* to *Hydrábád* any expedition would be best conveyed by water, and could the country-boats be seized or secured they would be found best adapted for the purpose, being broad and flat-bottomed. From *Tatta*, however, an army might advance by land till it came opposite the island upon which *Hydrábád* stands, at about five or six miles from the shore; but this is liable to two objections, first, the badness of the road for one-third of the way; and, secondly, the difficulty of crossing the Indus, near *Hydrábád*, where the stream is three-quarters of a mile broad."

This intelligent gentleman, who resided for some time in Sindé, further says, that "to him the country appears easily subdued by a maritime power. Vessels could act in the Indus, and command its navigation, and gun-boats drawing six feet of water could act in the lesser streams." He is wrong, however, I think, in stating that "a detachment could be conveyed in country boats to *Ali bander*, and that a force by the Indus might be brought to act with the detachment by land;" for there is not a sufficiency of boats on the *Corí* or *Lacpat* branch to convey even a very small number of troops; but this river, as I have before shewn, has lately undergone much alteration, and is only navigable as high up as *Ali bander* at certain seasons. It would also be necessary to transport every kind of stores along with the detachment, while all this could be accomplished equally well, and one detachment second the other, by crossing the *Pacham* island, and marching from *Bállyari* to the Indus.

A pontoon train would come into play with great advantage on the Indus, but I question if the objects of the expedition could not be equally well accomplished with basket-boats and *kejerí* pots, used as they generally are in India.

(J.) The ruins of this city lie near *Saira*, and are of great antiquity. It was built by the *Chaorá Rájapúts*, who appear to have had sway over both the extremities of Cutch, previous to the Muhammedan invasion, and to have been coeval with the "*Sath Sánd*" tribe of *Rájapúts*, who ruled at *Guntrí*. I have not been able hitherto to ascertain any thing satisfactory on its history. Its walls are still to be traced, and are about two thousand yards in circumference. It would be a singular fact, if these ruins turned

out to be the remains of *Xylenopolis*, or the city of wood; and it is curious that the Hindústání word for wood, *lucrí*, should be nearly found in the name of the town of *Lacpat*. I put no faith, however, in this etymology, and merely give it as it has occurred to me.

(K.) Wheeled carriages are not used in Sinde, on account of the numerous rivers; and merchandize is exclusively transported on beasts of burden, and generally on camels. These animals, says CROW, "are bred in great numbers in the salt marshes of the delta of the Indus, and are very hardy and superior to those bred inland. They generally travel at night, and carry from five to six cwt. Mules, asses, and bullocks, are also used, and their number is not inconsiderable."—CROW'S MSS.

(L.) *Amercote* is known in the history of India as the retreat of the Emperor HUMÁIÚN, and the birth-place of his son, the great ACBAR. The riches of the *Amírs* of Sinde are now deposited there, they having at last secured it from the *Judpúr Rájá*.

(M.) In Cutch there are two separate establishments of *Jógís*, one at the *Denódar* hills and the other at *Manfarrá*, in *Wágar*. They are called by the natives "*Cánp'hattís*" or slit-ears, from their cutting their ears to admit of large unseemly rings of ivory, bone, and sometimes agate, being suspended in them. Those at *Denódar* lead a life of celibacy, but their brethren in *Wágar* are not equally strict. It is among this class of people that the horrid practice of "*traga*," or sacrificing one of their number, generally an aged person, prevails. They resort to it when any oppression is committed on them, and cast the blame of the blood that has been shed, on those who have injured them.

(N.) About ten miles south of the *Runn*, and thirty-six W.N.W., of *Bhúj*, are the ruins of the city of *Gúntrí*, in the district of *Chitráno*. The walls are two thousand two hundred and fifty yards in circumference, and it is now entirely deserted. The traditions of the country state it to have been destroyed by the *Jhárejás*. Old coins are often found here and at *Neróná*. They have the figure of an ass on them and are called "*Gadhia ca-paisa*." About sixteen miles south-east of *Guntrí* there is another ruined city, called *Púragad*, believed to be nine hundred years old, and built by a nephew of LÁCÁPÚLÁNÍ, and to have had a curse imposed upon it at his death. There is a two-storied palace within its walls, which is a great curiosity, and in very good repair.

(O.) I was little aware when I stated this conclusion that I had such strong concurring testimony as that of the late Captain McMURDO, who in his Memoir of *Cáttýwár*, so long since as 1815, had expressed a similar opinion, and as he wrote of a different part of the *Runn* from what I have described, or that bordering on *Cáttýwár*, I look upon the following extract from his paper as a great additional argument in favour of the *Runn's* being navigable:—

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“ The *Runn* has every appearance of the sea having shortly withdrawn from it. This is supported by the semblance and production of the neighbouring country, and large stones are found on this shore several miles from the present *Runn*, of a description similar to those used as anchors: they have holes bored through for the cable. On the shore at different places are shown small ancient buildings, called *Dán Derís*, or houses where the *dán* or customs were collected, and, in short, it is a tradition in the country that *Khór*, a village two miles east of *Ticar*, was a sea-port town. About fifty years since the wreck of a vessel, of a size far beyond that of any of the craft now in use in the gulf of Cutch, was discovered at *Wawánia*, sunk in the mud about fifteen feet. The sea is gradually encroaching there, and has assumed the shape of a deep and narrow creek, which at low water is left dry. As the bank was carried away the wreck became exposed, and the timber was used in the village of *Wawánia* for fuel; there was no iron in the vessel, she was bound by cordage of coir. The circumstances would induce a belief that at some former period the gulf of Cutch penetrated very high up to the eastward, although it is a well-known fact, that it has been increasing for these last hundred years, during which period it has been much enlarged.”—Extract from MS. Memoir on *Cáttýwár* by Lieutenant McMURDO, August 1815.

That the gulf of Cutch has been encroaching for the last hundred years I much question, if so, it certainly has not been upon Cutch itself, but towards the eastward; for in the memory of man, the width of the gulf has been contracted, as its waters, about fifty years ago, approached close upon the walls of *Mandavie*, and now the sea is three hundred yards distant, and recedes yearly. So much indeed has this been the course of events throughout, that about three miles above the present town of *Mandavie* the natives point out the remains of a town called by them “ *Old Mandavie* ” which is believed to have been a sea-port three hundred years since, and near which old coins are still frequently found; the fields about it are strewn with shells, all of which is against the opinion expressed of the sea encroaching. The creek which Captain McMURDO alludes to near *Wawánia-bander*, in which the wreck was laid open, might easily have been formed without a general approach of the gulf water, as the course of a rivulet, or the most trifling cause, would turn water which is blown up by the winds.

(P.) It is a singular fact that Cutch, which was included in the *Ahmedábád* division of the Moghul empire, was by a *firmán* of the Emperor JEHÁNGÍR, exempted from paying tribute, on the stipulation of transporting, free of expense, yearly, such pilgrims as should pass from the neighbouring provinces on their road to Mecca.

APPENDIX No. I.

AT THE ANNUAL MEETING OF THE ROYAL ASIATIC SOCIETY,

Held on the 7th of June, 1830;

SIR ALEXANDER JOHNSTON, Chairman of the Committee of Correspondence, having verbally reported the proceedings of that Committee since the Anniversary in 1829;

It was RESOLVED,

“That he be requested to reduce his report to writing, and that it be
“printed in the Appendix to the Society’s Transactions.”

THIRD REPORT OF THE COMMITTEE OF CORRESPONDENCE. OF THE **Royal Asiatic Society.**

THE object for which the Committee of Correspondence was established is, that it may become a medium through which persons in Asia may obtain from Europe, and persons in Europe may obtain from Asia, such information relative to the East as they cannot otherwise obtain with the same degree of facility; the nature of the proceedings of the Committee must, therefore, in a great degree, depend on the nature of the inquiries which are making in Asia and in Europe relative to India. In reporting its proceedings during the last year, we shall arrange them under four different heads:—Under the first, The inquiries relative to those languages which are called the Polynesian languages;—under the second, The inquiries relative to the history of the intercourse which has subsisted between Europe and Asia, from the earliest ages to the present period;—under the third, The inquiries relative to such of the institutions in India as most materially influence the moral and the political state of the natives of the country;—under the fourth, The inquiries relative to the history of the descendants of the different foreign nations, European as well as Asiatic, who have from time to time settled in different parts of India.

First, Baron WILLIAM HUMBOLDT, the great philosophical grammarian, whose letter to Sir ALEXANDER JOHNSTON, on the most useful method of inquiring into Oriental languages, has been published in the Transactions of the Society, is at present engaged in an investigation of the affinities between the different languages which prevail amongst the islanders inhabiting the islands that extend from the Pacific Ocean east, to Madagascar west; and with a view of ascertaining whether these different languages are all modifications of one language, is anxious to obtain from the island of Madagascar specimens of the several languages which are spoken by the different people who are settled upon that island, conceiving from the resemblance which appears between these languages and those which prevail in the other islands, that such specimens will enable him to come to a satisfactory conclusion upon the subject. Sir CHARLES COLVILLE, the Governor of the Mauritius, has therefore, at the request of the Committee of Correspondence, obtained for him a great many different specimens of the languages of Madagascar, printed at the Missionary Press in that island, with some very interesting observations by the Rev. Mr. FREEMAN, one of the Protestant missionaries on the island.

Secondly, Professor HEEREN, the Professor of Oriental History at Göttingen, who is so distinguished all over Europe for his researches into the history of the intercourse which subsisted in ancient times between Asia and Europe, being anxious to avail himself of the influence of the Royal Asiatic Society, in prosecuting his inquiries, has sent the Committee instructions for their guidance in collecting information upon the subject, and they will direct their researches into the history of the people settled in ancient times along the coasts of Egypt and Syria, along those of the Red Sea from Suez to Bab-el-Mandel, along those of Abyssinia, along those of the Persian Gulf from Bussorah to Bushire, along those of Coromandel and Malabar, along the banks of the Ganges and Brámaputra, and particularly along the north-west coast of Ceylon, and the south-east coast of the peninsula of India, which are close to the two passages called the Paumbum and Manár pass, and which are contiguous to the pearl fisheries so celebrated of old as the great emporiums of trade between the eastern and western divisions of the world. The Committee expect to derive information upon this part of history from the manuscripts and other ancient documents in the libraries at Cordova, Seville, Genoa, Venice, and Constantinople, and from the Asiatic Committees established at St. Petersburg and Odessa.

Thirdly, Amongst other institutions in India, the Committee have directed their attention particularly to those of property and marriage, conceiving that they are the two institutions which in India, as in every other part of the world, are those which have the greatest influence upon the moral and the political state of the inhabitants of the country, whose freedom and prosperity must depend in a great measure upon the wisdom of the laws and customs by which these two institutions are regulated and protected amongst them. In investigating the state of property in India, the Committee have considered it under two heads:—1st, As it relates to property in slaves. 2dly, As it relates to property in land. Upon the first they have derived much valuable

information from Mr. BABER. Upon the second they have referred with great advantage to the work recently published by Colonel BRIGGS. In considering the institution of marriage, the Committee hope to have the assistance of the same gentleman, and to be able to procure a clear and well arranged statement of that institution, as it prevails under various modifications, in different parts of India.

Fourthly, The descendants of the different foreign nations who have from time to time settled in India, are the Jews at Cochin, on the Malabar coast; the Afghans in the northern part of India; the Parsís at Surat and Bombay; the Muhammadans in the north and the interior of India, and those on the coasts of Malabar, Coromandel, and Ceylon,—the former descended from the Moguls, the latter from the Arabs, the Portuguese, the Dutch, the French, the Danes, and the English. With respect to the history of the Jews at Cochin, the Committee will have the benefit of the advice of Professor MILMAN, the author of the History of the Jews; he will draw up instructions to guide the Committee in their researches, and to enable them to procure such information as may be wanted to complete that portion of the Jewish history which relates to those Jews who from the earliest times have established themselves in different portions of Asia. Lord PRUDHOM has numerous specimens of the ancient characters which are found upon Mount Sinai, and in the country through which the Jews performed their pilgrimage, and his Lordship will give the Committee copies of these specimens, for the purpose of enabling them to ascertain if the Jews at Cochin, or if any other people in India, are acquainted with the characters and can decipher them. With respect to the Afghans, the Committee will endeavour to learn, from Mr. ELPHINSTONE and from the translations which are about to be made of the history of that people, whether there be any real foundation for the opinions which have been circulated, that they are descended from the Jews, and that they are connected with the several bodies of Jews who are dispersed throughout India. With respect to the Parsís, the Committee will refer, through Sir CHARLES FORBES, who is so highly esteemed by them, to the distinguished Parsís who are established at Surat and Bombay. With respect to the different classes of Muhammadans, as well those who are established in the interior as those who are established on the coasts of India, the Committee will collect information from the different manuscripts in Arabic and Persian, which are found in India, Persia, Turkey, Russia, and England, and from those early works of the Portuguese which treat in a detailed manner of the establishment and commerce in India of the Muhammadans, who were the great rivals of that nation in trade and in arms when they first made their settlement in India, and on the coasts of Ceylon. With respect to the Portuguese, the Dutch, the French, the Danes, and the English, the Committee will find ample sources of information amongst the valuable records which are preserved in the archives of those nations, both in India and in Europe, and in the proceedings at Rome, in Spain, and in Portugal, of the different Catholic missions which have establishments in India. Such information will enable the public to judge of the effects of the different systems of policy which have been observed by each of the foreign nations established in India; many of which have encouraged the colonization of their descendants in India, and have endeavoured, upon

principles of policy, to impress upon the minds of the natives of the country an idea of respect and veneration for those descendants, and their religious and moral institutions.

The Committee having opened a communication with the inhabitants of the Mauritius, with the Parsís at Bombay, and with the descendants of Europeans in India, known by the appellation of East-Indians, expect to acquire from them much insight into the local history of the several countries in which they reside.

The inhabitants of the Mauritius have always been distinguished for their attention to science and to natural history. The establishment of a college on that island affords them a great facility in promoting the education and enlarging the understanding of their children. Their recent formation of a society for investigating the natural history of their own and of the adjacent islands, is an additional proof of their desire to collect and communicate to their countrymen every description of useful knowledge. The conduct of Mr. TELFAIR and Monsieur DABADIE, the former in his botanical and agricultural, the latter in his astronomical researches, deserves the highest approbation from the Royal Asiatic Society, which is already indebted to the Mauritius for some observations connected with astronomy, meteorology, and the variations of the magnetic needle.

The Parsís of Bombay entertain the most liberal feelings in favour of science and literature: they possess great wealth, and commercial relations with every part of Asia. The mission sent by them some years ago to Persia at their own expense, of KAUS, the father of MULLA FIRUS the editor of the *Desatír*, for the purpose of making inquiries relative to the remnant of the Parsís in that country; the discovery by KAUS while on that mission of a copy of the *Desatír* in the Pehlivi language, and the English translation of that curious work, published by MULLA FIRUS at Bombay in 1818, shew the spirit and the perseverance with which the Parsís of Bombay have instituted inquiries connected with the history of their country. The talents and the acquirements of the late Parsí naval architect, BOMANJI JAMSETJI, shew their capacity for acquiring and applying to important purposes, the most useful and the most difficult branches of mathematical and mechanical sciences, and the benevolence, the zeal, and the prudence with which his nephew BOMANJI HORMAJI is at present engaged in urging every measure by which the education, as well as the moral and the political improvement of his countrymen can be assisted, shew the correct views which they entertain of the principles of a free government, and the high value which they attach to the acquisition of the English language, to an efficient system of education, to the cultivation of their understanding, and to the unrestricted circulation throughout British India of European science and European literature.

The East-Indians who are established in different parts of India, are, from their descent, from their education, from their acquaintance with the English and the local languages, and from their associating with the natives, well adapted, provided proper encouragement be given them, to procure the most accurate and detailed reports on the situation of the country; and on the religion, manners, and usages of the people. Mr. GEORGE HUGHES, who is so distinguished for his talents and his

local knowledge in the peninsula of India; the late Mr. WHEATLEY, who held an office under the collector of Madura, and all the young East-Indians who were employed by the late Colonel M'KENZIE in surveying the country, and in inquiring into the history and the antiquities of the people, afford decisive evidence of the importance to science and literature of employing gentlemen of this class in making the researches to which the Royal Asiatic Society has directed its attention. Mr. RICKETTS, who is now in England for the purpose of submitting to Parliament such information as it may require relative to the present situation of his countrymen, has, with great credit to himself, promised to use his influence with them in securing their co-operation for the Society. The ability and manly character which this gentleman has evinced since his arrival in England, and the zeal with which he has entered into the views of the Society, lead the Committee to anticipate with confidence that the Society will derive the greatest benefit from his co-operation, and that of his countrymen in every part of the continent of India. The Committee likewise expect to receive much assistance from the descendants of Europeans on the Island of Ceylon, who, as well under the Dutch as under the English government, have been employed in the most respectable and confidential situations, and who have always shewn, in the discharge of their respective duties, not only great talents, but a high sense of honour, and an earnest desire to aid in every research which is connected with the history of that island.*

The Committee trust that the report which has just been made of their proceedings during the year, will shew that this Society is so constructed as to be enabled to obtain through its different members, for the British government and the British public, such local information upon many points now under public consideration, as can only be acquired by a long residence in India, and by an attentive observation of the country and of its inhabitants.

NOTE.

* Sir ALEXANDER JOHNSTON when president of His Majesty's Council in Ceylon, conceiving that his Majesty's Ministers could not efficiently adapt the system of the British government to the situation of the natives of the country without a thorough knowledge of their history, their religion, their manners, their customs, and even their prejudices, collected, with the assistance of many of these gentlemen, and that of the late RAJAH PAXA, who was the native chief of the Cinnamon department, and the best Sanscrit, Pali, and Cingalese scholar in Ceylon, and caused to be translated into English, for the information of the British Government, the three most ancient histories of the Island of Ceylon, called the *Mahāvamsi* the *Rājavalī*, and the *Rājaratnācari*. The local histories of the Provinces of Trincomalee, the Wannie, Jaffna, Mantotte, and Coudramallee, the *Hipporos* of the Greeks, on Ceylon; the history of the island and of the pagoda of *Rāmiseram*; the histories of the four provinces of Ramnad, Madura, Trichinopoly, and Tanjore, which formed a part of the *Regio Pandionis* of PROBLEMY, on the southern peninsula of India, and various other works connected with the local histories of the principal *Hindū* and *Buddhist* temples on Ceylon.

APPENDIX, No. II.

AT THE ANNUAL MEETING OF THE ROYAL ASIATIC SOCIETY,

Held on the 7th June, 1831;

SIR ALEXANDER JOHNSTON, Chairman of the Committee of Correspondence, read the Report of that Committee's operations since the Anniversary in 1830, as follows:

FOURTH REPORT OF THE COMMITTEE OF CORRESPONDENCE OF THE **Royal Asiatic Society.**

THE Committee of Correspondence have to report on this occasion, that since the last Anniversary Meeting their attention has been directed to the following points of research, *viz.*

1. The history of the intercourse that has been carried on between Europe and the East-Indies through the Red Sea, from the earliest period to the present time, and the information possessed upon this point by Professors HEEREN and BOHLEN, in Germany; M. de la BORDE, in France; and Mr. COFFIN, in Abyssinia.
2. The history of the Jews who are settled at Cochin and in other parts of India; to a set of inquiries drawn up for them upon this subject by the Rev. H. H. MILMAN, author of the History of the Jews, and to lithographic copies of the ancient inscriptions that were collected by Lord PRUDHOE in the country between Mount Sinai and the Red Sea; also to the nature of the intercourse that subsisted between the Jews of Abyssinia and those of Cochin, it being supposed by some persons that part of the Jews at Cochin are descended from Jews who originally came from *Adulis*, in Abyssinia, at the time when a very extensive trade was carried on between that port and Cochin, and the ancient port of *Hipporas*, now called Coudramallee, in the island of Ceylon.

3. The history of the Catholic descendants of the Portuguese and French who are settled in different countries in India. In this inquiry the Committee have received much assistance from the Abbé DUBOIS, who was so long in India, and who is now the Director General of all the Catholic missions in India which are supported by the French nation.

4. The geology of India. The Committee have received an interesting letter on this subject, addressed by M. JACQUEMONT to Sir A. JOHNSTON, dated at Ladakh, 18th September 1830, giving a short account of the observations he had made upon the geology of the Himalaya Mountains and the other parts of India through which he had travelled. They have also been informed by Lord WM. BENTINCK, that his Lordship will, as they requested him, distribute to the different surveyors' departments in British India, copies of the instructions which they have sent to his Lordship and to the Hon. Sir C. COLVILLE, Governor of the Isle of France, to enable them to collect such information as may be necessary for forming geological maps of the territories under their respective authorities.

5. The botany of India. The Committee have received from Dr. WALLICH a most valuable paper upon this subject, in which he illustrates the practical advantage that may be derived from an attentive observation of the vegetable productions of India.

6. The languages of India. As a very accurate knowledge has already been obtained by some of the most distinguished Oriental scholars of many, if not of the whole, of the languages that prevail in India, the Committee have devoted their attention more particularly to the languages of Thibet, Burmah, Laos, Siam, Pegu, and Cambodia, and those of the islands which extend from Borneo east to Madagascar west. On the language of Thibet the Committee hope to derive much information from the labours of M. CSOMA DE KÖROS. On those of Burmah, Laos, Pegu, Siam, and Cambodia, the Committee have received from Sir A. JOHNSTON a very interesting paper,* drawn up by the Rev. C. GUTSLAFF, who is at present making a missionary tour through Cochin China and the adjacent countries. In the languages of the islands in the Indian and Pacific Oceans the Committee continue to receive from Sir C. COLVILLE, and to forward to Baron W. HUMBOLDT, at Berlin, various important documents.

7. The laws of inheritance, as they prevail under various modifications in different parts of India.

8. The history of the Lake *Mæris* in Egypt, as connected with the history of the five great lakes or tanks in the southern and eastern parts of Ceylon, the traditions relating to which have induced some persons to suppose that they were constructed upon principles of irrigation derived from Egypt during the commercial intercourse which subsisted in ancient times between Abyssinia and the island of Ceylon.

9. The ancient state of agriculture in the northern and eastern parts of Ceylon; the commercial intercourse which subsisted in ancient times between that island and various

* Inserted in the *Transactions* of the Royal Asiatic Society, vol. iii. page 291.

ports in Persia, Arabia, and Africa, when the town of Mantotte was the great emporium of all the trade that was carried on by sea between the western and eastern portions of the globe; the antiquities of the island as illustrating the laws, religion, manners, and customs of the people, and as connected with the history, laws, and religion of the inhabitants of Siam; the botany of the island as affecting many of the moral and political changes which have taken place in the situation of the several castes of people in the country; and the zoology, particularly that portion of it which relates to the various species of elephants that are found in different parts of the island.

The reading of this report being concluded, Sir ALEXANDER JOHNSTON proceeded to develop the proceedings of the Committee in a more ample manner in the address of which the substance is subjoined; and it was then

RESOLVED,

“That he be requested to reduce his observations to writing, and that they be
“printed together with the Report in the Appendix to the *Transactions* of the
“Society.”

GENTLEMEN:

You have heard an account of the proceedings of the Committee of Correspondence for the last twelve months; some of them relate to India in general, some to the island of Ceylon in particular; they are all calculated to procure information relative to four questions of immediate interest and public importance. The first, that of the revival, in consequence of the discovery of steam navigation, of the commercial intercourse which was formerly carried on between Europe and Asia through the Red Sea. The second, that of the policy of allowing European British subjects to settle in the interior of India, for the purpose of introducing amongst the natives of the country British capital, British industry, British arts and sciences, and British improvements. The third, that of the practicability of framing a particular code of laws for the use of the natives of India, which shall be adapted to the circumstances of the country and to the wants of the people; which shall be divested of all technicalities; which shall be short and precise; and which shall materially diminish, if not entirely prevent the delay, the expense, and the inconvenience to which the administration of justice is now subject in India. The fourth, that of the different measures which are necessary to restore the northern and eastern provinces of Ceylon to the state of agricultural and commercial prosperity which they enjoyed from the first to the fifteenth century, when they were the emporium of all the maritime trade which was carried on between the western and eastern portions of the globe. It is essential to the character and success of the Society, to have it generally known that the researches of the Committee are not only of importance to science and literature, but, that they are of immediate use to the public; I, therefore, feel it to be my duty as Chairman of the Committee, to point out distinctly in what manner each of the researches which we have instituted during the last twelve months is of immediate use-

to the public, by procuring for them such information as may enable them to form a correct judgment upon the one or the other of the four questions to which I have alluded.

It is of immediate use to the public, at a time when many persons are desirous of reviving, in consequence of the discovery of steam navigation, the intercourse which was carried on in ancient times between Europe and Asia, through the Red Sea, to have before them all the information which can now be procured, relative to the manner in which that intercourse has been carried on in different ages, by different nations, and relative to the commercial and the political effects which it has successively produced on the prosperity of those nations.

The Committee have, therefore, with a view to the first question, directed their researches to the history of Palmyra, Balbec, Petra, Suez, Adulis, Cairo, Thebes, Cocyra, Eziongeber, and Acbana, during the period when those places were enriched by the trade which was carried on between Europe and India, through the Red Sea; they have examined all the ancient and modern maps of the river Nile and of the Red Sea; the present state of the steam navigation in that river, and in that sea, the degree of encouragement it is likely to receive from the Páshá of Egypt, and the probability of his discovering coals in his own or in the neighbouring countries; they have referred for information to the valuable works of HEEREN and LABORDE, and trust that Mr. MARSDEN, who has already illustrated with so much ability the travels of MARCO POLO, will enable them, by illustrating in a similar manner the work of INDICOPLEUSTES, to ascertain the geographical positions of many of the ports, which that work describes as the great emporia of the Indian trade in former ages.

It is of use to the public, at the time when the British Parliament are deliberating upon the policy of allowing Europeans to settle in the British possessions in India, to be fully acquainted with the history of all the descendants of foreign nations, who are settled in other parts of India; with the mineral and vegetable productions of the country, and with the various languages which are spoken by the several people who inhabit the neighbouring territories. The Committee have therefore, with reference to the second question, directed their researches to the history of the descendants of the Jews, who are established at Cochin; of the descendants of the Syrian Christians who are established in the Travancore country; and of the descendants of the Portuguese and the French, who are established at Goa and Pondicherry. To the botany and geology of India, and to the different languages which are spoken in Siam, Laos, Cambodia, the Burmese empire, and Thibet; the Committee have been assisted in their enquiries respecting the history of the Jews, by the instructions drawn up for their use by the Rev. Mr. MILMAN; by the fac-similes sent them by Lord PRUDHOE, of inscriptions found by his Lordship between Mount Sinai and the Red Sea; and by some ancient accounts of the Jews settled in Abyssinia. In those respecting the descendants of the Portuguese and the French, by the Abbé DUBOIS; in those respecting the botany of India, by Dr. WALLICH, who has prepared for their use a paper upon the subject, drawn up by him partly from his own information, and partly from that of the late Dr.

BUCHANAN HAMILTON : in those respecting the geology of India, by M. JACQUEMONT, one of their foreign members; and by Lord WILLIAM BENTINCK, to whom they have forwarded a copy recently given to them by Dr. FITTON, the late President of the Geological Society, of the instructions which were originally prepared by that eminent geologist, for the use of the officers who were employed in the survey of Ireland : in those respecting the languages of Siam, Laos, Pegu, Burmah, and Cambodia, by a paper written by the protestant missionary, the Rev. Mr. GUTZLAFF, and presented by me to the Society. In those respecting the language of Thibet by the Oriental Translation Committee, who, on my proposal have offered to purchase the Grammar and the Dictionary compiled by Mr. CSOMA DE KÖROS, a native of Hungary, who has been for some time on his travels through different parts of Asia.

It is of use to Parliament, at a time when they are deliberating upon the advantage of framing a separate code of laws for British India, to be acquainted with all the different modifications of the laws and usages, which at present prevail amongst all the different classes of inhabitants throughout that immense empire. The Committee have therefore, with a view to the third question, directed their researches to the laws and usages of all the different natives who live under the British authority in India. Aware of the great influence which the right of property and the laws of inheritance have had in all ages and in all nations, in leading human society to its highest improvements, they have particularly examined those laws and usages in India, which are directly or indirectly calculated to secure the right and to regulate the inheritance of property of every description. They have traced the origin and the different modifications of all the different laws of inheritance, as well those according to which property descends in certain proportions both to males and females, as those according to which it, in some provinces, and amongst some classes of people, descends only to females : the various rights of children by birth, and those of children by adoption. The difference between the rule of law, which applies to the property which a person inherits from his ancestors, and that which applies to the property which he acquires by his own industry and talents. They have considered the moral and the political effect of all these laws and usages upon the character of the people, and the prosperity of the country ; they have derived much valuable information upon the subject from the memoir of the late General WALKER, and they expect to derive still more from the appendixes which will in future be attached to each case, which is brought in appeal from the Courts of *Sadder Adalat* at Calcutta, Madras, and Bombay, before the King in Council in this country.*

* The circumstances which led to the addition of an appendix of this description to each case in appeal, shew the great benefit which the natives of India, and the government of Great Britain, may derive from the labours of this Society. Sir ALEXANDER JOHNSTON, about five years ago, while engaged as Chairman of the Committee of Correspondence, in researches relative to the ancient history and laws of the Rájás of Ramnad, discovered that a case involving the right of succession to the Zemindary of Ramnad, and forty-nine other cases, involving questions of *Hindú* and *Muhammedan* law of great importance, had been in appeal, from the Courts of *Sadder Adalat* in India, before the King in Council, for a great many years, and that they had not been heard in consequence of the

It is of use to his Majesty's Ministers, at the time they are adopting measures for restoring the Island of Ceylon to its former state of agricultural and commercial prosperity, to be made thoroughly acquainted with the ancient and present state of every part of that valuable island. The Committee therefore, with a view to the fourth question, have directed their researches to the ancient history of the island, to the ancient site of its principal cities, to its ancient code of morals, to its ancient form of government, to its ancient trade, to its ancient system of agriculture and irrigation, and to its animal and vegetable productions. They are collecting all the geographical and local information necessary to explain and illustrate the English translation of the three ancient histories of Ceylon, the *Mahāvansi*, the *Rājavali*, and the *Rājaratnācari*,* all the manuscripts which contain any account of the ancient cities and temples of Jaffna, Mantotte, Anarājapura, Monisseram, Trincomalee, Trecoil, and Dewandera, of the early sanctity of Adam's Peak and Cadregam, and of the frequent pilgrimages performed in ancient times by innumerable devotees and invalids from the most distant parts of India to the ancient Hindú temple at Trincomalee, and to the different hot wells in that neighbourhood, which were believed by the Hindús in those days to be one of the favourite resorts of the sage called ANGUSTIER, adored throughout the Peninsula of India for his medical knowledge and his universal wisdom. They are about to have an English translation made of the great *Buddhist* work in our library called *Pansiya-panas-jatakaya*, which contains a description of 550 of the transmigrations of BUDDHA, and the whole system of morals observed by the *Buddhists* in Ceylon.† They are comparing the account drawn up by the late Sir John D'OXYLY, with all the other accounts drawn up at different times by different persons in Portuguese, Dutch, and English, of the form of government which prevailed in the Candyan country for upwards of two thousand years, and which affords a very correct picture of the form of government

parties interested in them, who were all natives of India, being ignorant of the steps necessary to be taken to bring them forward before the Privy Council. Sir ALEXANDER, immediately on this discovery, adopted measures by which the attention of his Majesty's Government, and that of both houses of Parliament, were called to the subject; and at the same time stated to Government, that the best way of remedying the evil for the present, and preventing its recurrence for the future, would be to attach a civil servant of the East-India Company's service, well acquainted with the proceedings of the *Sadder Adálat*s, as a Registrar of East-Indian appeals to the Privy Council, and in order that the Privy Council might become thoroughly acquainted with the nature and importance of those appeals, advised them to employ Mr. RICHARD CLARKE, a member of this Society, to whom Sir ALEXANDER had previously communicated his ideas upon the subject, in arranging all the papers connected with the appeals, and in having them printed with such ample appendixes as might exhibit in a clear manner to the public, the different parts of the *Hindú* and *Muhammedan* law, according to which the decisions of the Privy Council are regulated. The suggestions of Sir ALEXANDER having been adopted, and Mr. CLARKE having been employed, all papers relative to the different cases of appeal have now been arranged by that gentleman, and are about to be printed with an appendix attached to each of them, similar to the one presented by Sir ALEXANDER to the Society some days ago.

* Sir ALEXANDER JOHNSTON had these translations made while he was in Ceylon.

† This copy was procured by Sir ALEXANDER JOHNSTON from the celebrated temple of *Mulgerigalle* in Ceylon, and presented by him to the library of the Society: he had great difficulty in procuring so correct and so complete a copy; he succeeded after various inquiries in obtaining it by the assistance of some very intelligent Priests, whom he employed in collecting for him copies of all the most scarce and the most valuable of the works of the *Buddhists*, from the numerous collections in the different *Bauddha* temples in Ceylon.

that prevailed amongst all the *Hindús* throughout India in the most remote ages. They are enquiring into the nature of the lucrative trade which was carried on from the first to the fourteenth century, between the ancient Port of *Adulis* in Abyssinia and that of *Hipporos* in the island of Ceylon; into the course pursued during the same period by vessels of considerable bulk while navigating the only two passages, the one near the Island of *Rámiseram*, the other near that of *Manár*, which lead through the ridge of sand banks extending from Ceylon to the southern peninsula of India, and generally known amongst Europeans by the name of *Adam's Bridge*; into the history of the *Muhammedans* established on the Island of *Manár* in the eleventh and twelfth centuries, who by their armed vessels commanded every approach to those two passages; into that of the pearl and chank fisheries on the coasts of the peninsula of India, and on those of the island of Ceylon, from the earliest period to the present times; and into that of the female sovereign called *ALIARSANEY*, who reigned in the early period of the history of Ceylon over the north-eastern portion of the island, and who was celebrated in her days for the greatness of her wealth, for her genius and acquirements, and for the patronage which she afforded to those who were distinguished for their knowledge in science and literature. They are collecting all the information which can be obtained relative to the six large tanks or reservoirs of water on the island, which are believed to have been constructed in the same age and on the same principles, as the lake *Mæris* in Egypt, and the extensive tanks in the peninsula of India, and which are celebrated in the ancient annals of the island for the skill with which they were regulated, and for the quantity of water with which they could always supply the rice-fields in their neighbourhood. They are enquiring into the natural history of the island, its zoology and botany, into the character and habits of its elephants, and the practicability of adapting them to particular descriptions of labour;* into the growth and culture of its cinnamon, of its *cháya* root (the *olderlandia umbellata* of LINNÆUS,) and of its several varieties of the palm; of the *talpát* (the *coryphæa umbraculifera*), and the Jaggery (the *caroyta urens*), in the interior, of the coco-nut (the *cocos-nucifera*), in the southern, and of the palmyra (the *borassus flabelliformis*) in the northern provinces. Into the local limits within which each of these are brought to perfection. Into the several uses and manufactures to which they are applied. Into the moral and political effects which they have produced upon the situation and habits of all the people who are employed in their cultivation, and in the manufacture of their produce. Into the practicability of forming a botanical map of the whole island. Into the knowledge which the natives of Jaffna have possessed from the earliest times, of the male and the female of the palm called the Palmyra palm, or *borassus flabelliformis*. Into the practical use which they have made of that knowledge. Into the manner in which it was first communicated by them to the Dutch botanist HERMAN,

* The late Marquis of LONDONDERRY, on the suggestion of Sir ALEXANDER JOHNSTON, had determined in 1809 to establish a Zoological society in Ceylon, on a plan which Sir ALEXANDER had given him, but his lordship's resignation soon afterwards, of the office of Secretary of State for the Colonies, prevented this plan from being carried into effect.

while he resided in Ceylon from 1670 to 1677; and into that in which it was, fifty years after his death, communicated by AUGUSTUS GUNTER, an apothecary at Copenhagen to LINNÆUS, who on receiving HERMAN'S papers from him, discovered the information which ultimately led that great naturalist to the classification of all vegetable productions according to the sexual system.*

Having explained to the Society the different points to which the researches of the Committee have been directed during the last twelve months, I shall take the liberty to call their attention to some events, which must facilitate the future proceedings of the Society, and extend the influence of science and literature over the *Hindû* and *Muhammedan* population of Asia.

The English and the French governments, equally anxious to promote scientific enquiries in India, have recently aided each other in the attainment of this great object. France, by the appointment of M. JACQUEMONT, an eminent naturalist, to proceed to India and to remain there for seven years upon a public salary, for the purpose of investigating the natural history of that country. England, by affording M. JACQUEMONT in every part of British India the most ready and the most efficient assistance. Both nations, by completely divesting themselves of the national jealousy which has so long prevailed between them, have set a bright example to all other nations of the cordial and unreserved manner in which all countries ought to co-operate according to the means which they respectively possess, in promoting those researches which are calculated to extend the limits of scientific and literary knowledge.

The Society have lately acquired the active and zealous co-operation in their literary researches of two very able Christian missionaries in India, the one a Catholic, the other a Protestant; the first the Abbé DUBOIS, well known in France and England, by the very interesting and very accurate account which he has published of the people of the southern peninsula of India; the second, the Rev. Mr. GUTZLAFF, a German gentleman, who is attached to one of the missions in the eastern peninsula of Asia, and who has for many years devoted his attention to the history and to the languages of the different nations who inhabit that peninsula.

The importance of obtaining the zealous co-operation, in our literary researches, of the missionaries, as well Catholic as Protestant, who are established in different parts of Asia, must be felt by all who consider the extent of the knowledge which has been

* The late Lord LIVERPOOL, on the suggestion of Sir ALEXANDER JOHNSTON, established a royal botanical garden in Ceylon in 1811, for the purpose of investigating and improving all the vegetable productions of the island, and introducing into different parts of it from foreign countries, all such trees, plants, shrubs, and vegetables, as might be of use to the inhabitants either as articles of food, or as articles of manufacture and trade. In order to give the natives a taste for the study of Botany, Sir ALEXANDER proposed to the late Mr. KERR, when he was appointed head of the botanical garden in Ceylon, to prepare for the use of the natives such a work in the Tamil and Cingalese languages as might enable them to understand the nature of the Linnæan system, and to arrange all the vegetable productions of the island according to that system. Mr. KERR died before he had prepared this work, but Mr. MOON, his successor, to whom Sir ALEXANDER had communicated his ideas upon the subject, some years afterwards published such a work in English and Cingalese. (a)

(a) *A Catalogue of the Indigenous and Exotic Plants growing in Ceylon, &c.*, by ALEXANDER MOON; 4to. Colombo, 1824.

derived of many countries and many languages through them for the last two centuries; the missionaries in India, both Catholic and Protestant, from the zeal and perseverance with which they study the languages of the countries in which they reside, and from the familiar manner in which they associate with the natives of those countries, have been enabled to obtain at all times and in all parts of Asia, the most curious, and the most important information relative to the manners, the history, and the religion, of the people, as is distinctly proved by the numerous publications of the Catholic missionaries relative to China, by the accurate knowledge acquired by ROBERTUS de NOBILIBUS in the seventeenth, and by BESCHI in the eighteenth centuries, of the people and languages of the southern peninsula of India, and by the very great progress which has been made in Oriental literature and in the languages of India and China within the last thirty years by the three celebrated Protestant missionaries, CAREY, WARD, and MORRISON.

The Right Hon. CHARLES GRANT, a member of our society, has been recently appointed by his Majesty to the high and responsible office of President of the Board of Control. The liberal and statesmanlike views which that gentleman entertains with respect to the government of British India, will secure for this Society his valuable support, and for the natives of India, such institutions as, by giving them a lively interest in the government of their country, will afford them a powerful motive for improving their understandings, and for promoting the study of European science and literature amongst all classes of their countrymen.

SIR R. WILMOT HORTON, another member of our society, has also been recently appointed by his Majesty to the office of Governor of the island of Ceylon. The lectures which that gentleman has delivered at the London Mechanics' Institution upon a subject of great importance to the interests and welfare of the different orders of society, and the very liberal manner in which he has discussed in print the merits of the opinions which he entertains upon the subject, show the activity with which he applies himself to the diffusion of useful knowledge amongst all classes of his countrymen, and the manly view which he takes of the use and the influence of the press, as an instrument for circulating throughout a country such ideas as may tend to the moral and political improvement of the people.

RAJA RAMMOHUN ROY, also a member of our society, a *Brahman* of ancient family, of high rank, of distinguished talents, and of great influence amongst his countrymen, acting upon the principles of a true patriot, has for many years written and published several very able works, the uniform object of which is to enlighten the understanding of his countrymen, and so to raise the standard of moral and political feeling amongst them, as to enable the *Hindús* of India once more to assume, by their proficiency in arts, science, and literature, the high station which they held in former ages amongst the most enlightened nations in the world. Urged by the duty which he owes to his country, and unmindful of the dangers which he had to encounter from a sea voyage and a change of climate, he has now come to England, in order that he may, after having examined on the spot the practical effects of all our moral and

political institutions, gradually introduce amongst his countrymen such of them as he may think applicable to their situation and conducive to their prosperity and happiness. No event connected with the interests of India can be more important than the arrival in England of so remarkable a man, at a moment when the British Parliament is about to legislate for the whole of the British empire in India, and must be anxious to learn the opinion upon the subject of so great a scholar and so enlightened a philosopher.

The Páshá of Egypt, one of our honorary members, a chief of a clear and vigorous mind, observing the advantage European states have derived from a similar policy, has publicly encouraged the introduction into Egypt of all those arts and sciences which are calculated to improve the understandings of the people, to mitigate the effects of their religious feelings, and to secure the stability of the local government; he has assimilated his army and his navy to those of Europe, and subjected them to European regulations and to European discipline; he has formed corps of artillery and engineers upon European principles; he has attached regular bands of military music to each of his regiments, with European instructors, who teach the Arab musicians according to the European notes of music, to play upon European instruments the popular marches and airs of England, France, and Germany; a short distance from Cairo he has established a permanent military hospital, and placed it under European surgeons, and the same rules as prevail in the best-regulated hospitals in Europe; and he has formed a school of medicine and anatomy, in which not only botany, mineralogy, and chymistry, are taught, but human bodies are publicly dissected by students who profess the *Muhammedan* religion, and who are publicly rewarded in the heart of a great *Muhammedan* population according to the skill and the knowledge which they display in their different dissections. At Alexandria he has established a naval school, in which the *Muhammedan* students are instructed in the several branches of geometry, trigonometry, mechanics, and astronomy, connected with naval architecture and the science of navigation, and a dock yard under the control and superintendence of a European naval architect, distinguished for his talents and his skill, in which, besides frigates and other vessels of smaller dimensions, four ships of the line, three carrying one hundred and ten guns upon two decks, and one of one hundred and thirty guns have been recently built; he has opened the old port, which was formerly shut against them, to all Christian vessels. He has encouraged the formation of regular insurance offices, and authorised Christian merchants to acquire a property in lands, houses, and gardens. He has employed an English civil engineer of great eminence on a very liberal salary to improve all the canals in the country and the course of the Nile; he is about to construct carriage roads from Alexandria to Cairo, and from Alexandria to Rosetta and Damietta; and M. ABRO, the cousin of his minister, is about to establish upon them public stage coaches, built on a model of one sent to him by a coachmaker from this country; he has introduced steam-boats, which navigate upon the Nile, and steam-engines, which are used for cleansing and deepening the bed of that river, and for various other public works; he has patronized the employment by Mr. BRIGGS of

two Englishmen, taken for the purpose from this country, in boring for water in different parts of the desert, and he has discovered through their operations some very fine water in the desert between Cairo and Suez;* he has encouraged the growth of cotton, indigo and opium, and the former of these productions is now a great article of trade between Egypt and England, France, and Germany; he has established schools in the country, for the instruction of all orders of his people, in reading, writing, and arithmetic; he has sent, at great expense to himself, young men both of the higher and lower ranks of society to England and France, for the purpose of acquiring useful knowledge, the former in those branches of science and literature which are connected with their service in the army, the navy, and the higher departments of government; the latter in those mechanical arts, which are more immediately connected with their employment as artizans and manufacturers; he has constituted a public assembly at Cairo, consisting of a considerable number of well-informed persons, who hold regular sittings for forty days in each year, and publicly discuss for his information the interests and wants of his different provinces; he patronises the publication of a weekly newspaper in Arabic and Turkish, for the instruction of his people, and finally he protects all Christian merchants who are settled in his country, not only in time of peace, but also in time of war, and afforded the European merchants who were settled at Alexandria and at Cairo, a memorable instance of his determination to adhere under all circumstances to this policy, by informing them, as soon as he received intelligence of the battle of Navarino, that their persons and their property should continue as secure as if no such event had occurred. I have dwelt at some length upon this subject because I have felt it to be my duty, in consequence of the information which I have received as Chairman of the Committee of Correspondence, to give publicity in this country to those measures, by which one of the most distinguished of our honorary members has restored to Egypt, in their highest state of perfection, all the arts and sciences of Europe; has emulated, as a patron of knowledge, the conduct of the most enlightened of the Caliphs of Bagdad; and has afforded, as a *Muhammedan*, a bright example for their imitation, to all the *Muhammedan* sovereigns in Europe, Africa, and Asia.

* The inhabitants of Africa and Arabia are indebted for all the benefits which they may ultimately derive from a knowledge of this art, to the philanthropy and liberality of our countryman Mr. BAIGGS, who was the first European who ever thought of applying this art to the discovery of water in the deserts of Africa, and who at his own private expense sent over from England to Egypt, the two Englishmen, who have succeeded by their skill in discovering water in the part of the desert which has been mentioned.

APPENDIX, No. III.

RESULTS of METEOROLOGICAL INQUIRIES, made at MADRAS, by JOHN GOLDINGHAM, Esq., F.R.S., M.R.A.S., M.A.S. Calcutta, &c. &c.—(Communicated 16th of January 1830.)

I HAVE the honour to lay before the Society some results of meteorological inquiries made at Madras, between the years 1796 and 1826. The observatory, where the barometer and the other instruments used were placed, was two miles and three-quarters distant from the sea, and about twenty feet above its level. It was known that the barometer in settled weather in India had a continued regular rise and fall in the twenty-four hours, and that the times of its greatest and least heights were nearly the same on different days; but I did not recollect that any observations upon a very extended scale had been made with the view of exhibiting such changes: in order therefore to obtain the quantities and times of these diurnal variations, I had the height of the barometer taken every hour during three days of each month in the year 1823. These observations are given in detail in the table beginning at page 374 of the volume of “Madras Observatory Papers.”

The rise and fall of the barometer were very regular in the twenty-four hours during the year; at about ten o'clock in the forenoon it was at its greatest height; it then began to fall, and continued falling until a little after five in the afternoon, when it was lowest; it then commenced rising, and before eleven at night attained its highest point; and was again lowest at four o'clock in the morning. Any change of wind or weather, of course, will break this chain of regularity, more or less according to the suddenness or violence of the change; but as there were no great or sudden changes at Madras in the twenty-four hours during the year 1823, the regularity is not much broken, scarcely at all indeed in the forenoon, but more at other times.

The following abstract, made from the hourly diary, shews the times of the greatest and least heights of the barometer in twenty-four hours: I have divided this into two equal intervals of six months, in order to shew what difference there would be between the means of each interval.

Times of the Greatest and Least Heights of the Barometer in Twenty-four Hours the
First Six Months of the Year 1823.

		Forenoon.	Afternoon.	Night.	Morning.
{ 1824 1823 }		Greatest.	Least.	Greatest.	Least.
Jan.	10	11 h.	4 h.	13 h.	3½ h.
—	20	10	5	9½	3
—	28	10½	5	10	3
Feb.	10	10	4	10	4
—	20	10	7	11	4½
—	28	10	4	9	5
Mar.	10	10	7	13	3
—	20	10	5½	10	4
—	30	10	6	11	5
April	10	10	6	10	5
—	20	10	5½	10	4
—	30	10	5	13	3
May	10	10	4	11	4
—	20	10	5	10	2
—	30	10	7	11	4
June	10	10	5	11	3
—	20	10	6	12	4
—	30	10	5	10	5
Mean		10·10	5·33	10·8	3·83

Times of the Greatest and Least Heights of the Barometer in Twenty-four Hours the Last Six Months of the Year 1823.

		Forenoon.	Afternoon.	Night.	Morning.
{ 1824 } { 1823 }		Greatest.	Least.	Greatest.	Least.
July	10	10 h.	6 h.	10 h.	— h.
—	20	10	7	12	5
—	30	10	5	—	4
Aug.	10	10	6	11	4½
—	20	10	5	10	5
—	30	11	5	11½	3
Sept.	10	10	4	11	3
—	20	9	4½	10	4
—	30	10	6	11	5
Oct.	10	10	6	10	5
—	20	10	5½	10	4
—	30	11	4	10	5
Nov.	10	10	7	11	5
—	20	10½	5	10½	5
—	30	10	5	11	4
Dec.	10	10	6	11	4
—	20	10	4½	10	5
—	30	11	6	10	4
Mean	..	10·14	5·42	10·6	4·38
Mean first six Months }		10·10	5·33	10·8	3·83
Mean	..	10·12	5·38	10·7	4·10

If we divide the year into equal parts, the means of the intervals will be found to agree equally near with the above.

The subjoined abstract shews the variations of the Barometer in the twenty-four hours of the days of observation in the diary. This is also divided into two intervals of six months each, and the means of each interval likewise agree together in a striking manner.

Variations of the Barometer in Twenty-four Hours for the First Six Months of the Year 1823.

		From 10 A.M. to 5 P.M.	From 5 P.M. to 10 P.M.	From 10 P.M. to 4 A.M.	From 4 A.M. to 10 A.M.
{ 1824 } { 1823 }		Inches.	Inches.	Inches.	Inches.
Jan.	10	0·052	0·034	0·010	0·025
—	22	0·083	0·028	0·023	0·078
—	28	0·060	0·051	0·025	0·034
Feb.	10	0·073	0·062	0·039	0·054
—	20	0·080	0·086	0·073	0·067
—	28	0·050	0·032	0·021	0·039
Mar.	10	0·093	0·036	0·033	0·090
—	20	0·057	0·047	0·040	0·050
—	30	0·068	0·040	0·035	0·063
April	10	0·077	0·069	0·059	0·067
—	20	0·096	0·053	0·025	0·068
—	30	0·078	0·078	0·029	0·019
May	10	0·107	0·135	0·118	0·018
—	20	0·077	0·075	0·027	0·021
—	30	0·079	0·043	0·026	0·064
June	10	0·102	0·054	0·035	0·083
—	20	0·078	0·106	0·058	0·030
—	30	0·085	0·053	0·014	0·046
Mean		0·078	0·060	0·038	0·054

Variations of the Barometer in Twenty-four Hours for the Last Six Months of the Year 1823.

		From 10 A.M. to 5 P.M.	From 5 P.M. to 10 P.M.	From 10 P.M. to 4 A.M.	From 4 A.M. to 10 A.M.
	$\left. \begin{smallmatrix} 1824 \\ 1823 \end{smallmatrix} \right\}$	Inches.	Inches.	Inches.	Inches.
July	10	0·088	0·010	0·002	0·080
—	20	0·110	0·093	0·038	0·055
—	30	0·065	0·070	0·010	0·005
Aug.	10	0·076	0·064	0·003	0·015
	$\left. \begin{smallmatrix} \text{Full Moon 22d} \\ \text{nearest ap-} \\ \text{proach 18th.} \end{smallmatrix} \right\} 20$	0·117	0·103	0·058	0·072
—	30	0·094	0·072	0·056	0·066
Sept.	10	0·075	0·085	0·025	0·015
—	20	0·113	0·070	0·015	0·056
—	30	0·103	0·123	0·065	0·045
Oct.	10	0·085	0·075	0·036	0·046
—	20	0·065	0·065	0·025	0·025
—	30	0·054	0·072	0·078	0·060
Nov.	10	0·092	0·022	0·045	0·015
—	20	0·048	0·048	0·004	0·004
—	30	0·064	0·049	0·010	0·025
Dec.	10	0·075	0·046	0·018	0·047
—	20	0·055	0·055	0·032	0·032
—	30	0·065	0·065	0·058	0·058
Mean	..	0·080	0·066	0·032	0·040
First 6 Months		0·078	0·060	0·058	0·054
Mean of both		0·079	0·063	0·035	0·047

The barometer is generally higher at about 10 A.M. than at 11 P.M., the times before-mentioned, when it reaches its greatest height in the twenty-four hours; and it is lower at 5 P.M. than at 4 o'clock in the morning.

It hence appears that the atmosphere is acted upon by an influence constantly and regularly operating during the year; that it has its greatest density at about ten o'clock in the forenoon, diminishing till five in the afternoon, when it begins to regain what it had lost; and continues advancing towards its first state until about eleven o'clock at night, when it has nearly the same density as in the forenoon. The diminution of density again begins, and a like effect is produced by the disturbing power as in the day; the atmosphere, however, is not affected in so great a degree as when the sun is above the horizon.

As it seemed that the heights taken during the usual interval of observing meteorological instruments, generally between sun-rise and eight or nine P.M., were not those best calculated for the purpose of finding the exact mean: in order to ascertain what corrections should be applied on this account, the thermometer and hygrometer were also observed, with the barometer, every hour during the interval before stated; also the winds and weather, together with the phases of the moon for each month; the day of the nearest approach of the moon to the earth in the month; and the day of her greatest distance. These observations are also given in detail in the Madras Observatory Papers.*

In the next Table are the heights of the barometer, thermometer, and hygrometer, taken from the ordinary diary on the days when the observations in the former Table were made, that is, the 10th, 20th, and 30th of each month; with the differences of the means of both sets of observations: these differences, contained in a supplementary table, are the corrections sought, and are applied to the daily means of the heights of the diary, as usually kept; a second supplementary table contains the corrections for the monthly means, found by taking the means of the daily corrections, and are also applied to the monthly means of the diary.

Madras is upon an open coast, and the time of the high-water at the *Syzigies* appears to be at 6h. 4m., the ebb and flow about six hours each way, with a rise and fall of little more than three feet.

If the times of these tides of the atmosphere, as they may be termed, as shewn by the barometer, varied daily, like the times of the tides of the ocean, we might consider the moon as mainly instrumental in producing them; but occurring at nearly the same hours every day of the year, whatever may be the phases of the moon, or her position in her orbit, we must be contented with allowing that planet her ordinary influence.

By selecting from the diary in 1823, for every hour the circumstances regarding the height and variation of the barometer with the winds and weather, and the position of the moon in her orbit, on days when the barometer was most likely to be affected by

* Table beginning at page 374.

that luminary ; also the greatest and least heights of the barometer on the same days, with the other circumstances relating to the moon, winds, and weather, in an interval of years from the common diary, we shall not be led to the conclusion, after a particular examination, that the moon has any material influence in the changes of the atmosphere here stated as shewn by the barometer : nor indeed shall we be able to conclude that her influence, like the sun's, is at any time considerable, as regards the ordinary changes and motions of the atmosphere. While the moon raises the waters of the ocean, and gives light to the earth, we should be led to conclude from such experiments, that she exerts only a steady attractive power upon the air, and that her influence as relates to the changes often attributed to it, is not by any means so great as is commonly supposed. With respect to the changes shewn by the observations here noticed, they are effected by regularly-ordained causes for the purpose of rendering the atmosphere suitable for the purposes intended, and of course for the benefit of the noble creation it surrounds ; it being essential that these changes should take place in the atmosphere regularly at or near the same times every twenty-four hours, while the times of the flux and reflux of the ocean are daily changing.

The following STATEMENT shews the corrected daily Mean Height at Madras of
Years 1796

DAYS.	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.	
	Barom.	Ther.	Barom.	Ther.	Barom.	Ther.	Barom.	Ther.	Barom.	Ther.	Barom.	Ther.
	Inches.	Deg.	Inches.	Deg.	Inches.	Deg.	Inches.	Deg.	Inches.	Deg.	Inches.	Deg.
1	30.105	75.43	30.104	76.25	30.046	79.93	29.990	82.88	29.920	85.18	29.834	89.01
2	30.086	74.79	30.089	76.19	30.085	80.04	29.977	82.49	29.924	85.12	29.839	88.32
3	30.197	74.80	30.092	76.22	30.067	80.55	29.986	82.71	29.931	85.62	29.838	89.04
4	30.101	75.05	30.077	76.39	30.029	80.46	29.988	82.19	29.917	85.09	29.852	88.69
5	30.098	74.62	30.079	77.11	30.025	81.04	29.976	83.02	29.903	85.90	29.852	88.74
6	30.101	74.42	30.087	77.27	20.020	80.06	29.965	83.40	29.904	86.12	29.843	88.34
7	30.117	75.23	30.074	76.81	30.033	80.53	29.986	83.34	29.910	86.55	29.836	88.28
8	30.120	74.76	30.084	77.21	30.027	80.63	29.968	83.37	29.904	86.22	29.840	88.50
9	30.112	74.59	30.077	77.26	30.066	80.87	29.963	84.23	29.865	85.78	29.852	88.33
10	30.111	74.60	30.083	77.82	30.022	80.55	29.956	83.60	29.885	86.51	29.851	88.08
11	30.127	75.09	30.106	77.68	29.981	80.50	29.965	83.60	29.885	86.37	29.850	88.41
12	30.114	74.69	30.091	77.56	30.028	80.67	29.977	83.45	29.875	86.08	29.850	88.59
13	30.116	75.07	30.082	77.49	30.035	80.60	29.964	83.60	29.873	87.22	29.870	88.15
14	30.109	74.89	30.076	77.52	30.035	80.48	29.949	83.93	29.869	87.25	29.869	88.54
15	30.123	75.16	30.082	77.07	30.031	81.29	29.960	83.88	29.866	87.43	29.862	89.19
16	30.095	75.54	30.069	77.39	30.014	81.80	29.951	83.55	29.876	86.65	29.859	87.57
17	30.105	75.27	30.069	77.93	30.008	80.84	29.930	84.44	29.862	86.82	26.853	88.16
18	30.104	76.16	30.027	77.77	30.010	81.14	29.931	84.46	29.876	86.87	29.858	88.88
19	30.091	76.17	30.068	77.92	30.007	81.34	29.934	84.40	29.870	87.13	29.855	88.19
20	30.116	75.91	30.004	78.98	30.002	81.54	29.926	84.09	29.863	86.92	29.865	88.29
21	30.091	76.22	30.075	78.97	30.000	81.47	29.917	84.43	29.839	87.83	29.872	87.26
22	30.102	76.67	30.051	78.85	29.994	81.85	29.933	84.39	29.848	87.34	29.874	87.13
23	30.092	77.27	30.082	79.13	29.997	81.82	29.927	83.73	29.848	87.72	29.879	87.33
24	30.081	76.91	30.071	79.15	30.000	81.57	29.944	85.59	29.846	88.99	29.878	86.93
25	30.079	77.18	30.070	78.75	29.996	82.35	29.946	85.06	29.855	87.97	29.886	86.57
26	30.074	76.75	30.071	78.50	30.004	82.67	29.940	85.36	29.850	87.78	29.889	86.57
27	30.106	77.40	30.077	78.31	30.003	83.77	29.926	85.42	29.830	88.32	29.886	86.50
28	30.073	76.52	30.065	78.97	29.992	81.37	29.929	85.15	29.833	88.51	29.879	87.10
29	30.097	77.14	30.072	78.36	29.983	81.57	29.924	85.25	29.839	88.37	29.877	86.43
30	30.099	76.86	—	—	29.965	82.27	29.906	85.58	29.848	87.99	29.864	86.58
31	30.100	77.38	—	—	29.973	82.44	—	—	29.833	87.51	—	—

APPENDIX.

XXV

the Barometer and Thermometer, as found by Observations taken between the
and 1822.

JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.	
Barom.	Ther.	Barom.	Ther.	Barom.	Ther.	Barom.	Ther.	Barom.	Ther.	Barom.	Ther.
Inches.	Deg.	Inches.	Deg.	Inches.	Deg.	Inches.	Deg.	Inches.	Deg.	Inches.	Deg.
29.847	86.91	29.891	84.43	29.892	85.53	29.950	83.18	29.996	80.76	30.063	77.20
29.843	86.57	29.881	84.51	29.891	85.19	29.940	82.93	29.994	79.74	30.068	77.90
29.839	86.90	29.892	84.85	29.879	85.17	29.939	82.82	29.994	79.93	30.056	77.65
29.863	86.58	29.893	84.45	29.876	85.30	29.934	83.20	29.999	80.33	30.068	77.17
29.854	86.75	29.893	84.58	29.881	85.56	29.936	83.10	29.998	80.23	30.059	77.15
29.857	86.05	29.894	84.28	29.897	84.41	29.945	83.05	29.993	79.73	30.051	77.06
29.839	85.81	29.879	84.33	29.886	84.33	29.947	83.00	29.992	80.15	30.051	76.92
29.846	86.70	29.871	84.60	29.877	84.55	29.957	82.41	29.994	79.51	30.063	77.38
29.845	85.97	29.862	84.48	29.896	84.61	29.946	82.58	30.004	78.54	30.077	77.37
29.855	85.86	29.870	85.00	29.895	84.09	29.957	82.75	30.004	78.46	30.053	76.86
29.844	85.11	29.870	84.73	29.901	83.50	29.978	82.82	30.000	79.02	30.063	76.72
29.842	85.52	29.876	85.21	29.900	83.21	29.984	83.15	29.998	78.52	30.087	76.36
29.854	85.82	29.878	85.55	29.898	84.04	29.962	81.79	30.003	78.95	30.076	75.83
29.850	85.59	29.874	84.84	29.900	82.95	29.951	82.35	30.018	79.32	30.077	76.11
29.853	84.99	29.871	83.72	29.898	84.09	29.958	82.39	30.030	79.02	30.090	75.83
29.851	84.99	29.882	84.94	29.899	84.17	29.958	82.16	30.032	79.07	30.090	76.20
29.856	84.75	29.879	84.20	29.900	83.78	29.965	81.66	30.033	77.38	30.087	76.19
29.854	85.11	29.869	84.16	29.911	83.11	29.967	81.78	30.039	78.88	30.091	75.93
29.862	84.97	29.875	83.82	29.909	82.61	29.958	82.09	30.050	79.07	30.104	75.72
29.861	84.96	29.885	83.33	29.913	82.63	29.946	80.55	30.050	79.02	30.099	75.92
29.833	84.64	29.871	83.78	29.911	82.67	29.980	81.67	30.057	79.23	30.095	75.24
29.864	84.12	29.867	84.53	29.911	83.17	29.930	81.95	30.066	79.25	30.098	75.37
29.866	84.74	29.878	84.73	29.924	82.89	29.986	82.04	30.062	79.56	30.105	75.14
29.864	85.24	29.885	84.16	29.924	83.11	29.966	80.30	30.060	78.92	30.105	74.72
29.867	84.62	29.890	85.26	29.917	83.44	29.974	81.53	30.038	78.68	30.113	75.91
29.870	85.06	29.897	84.33	29.920	83.03	30.003	80.73	30.040	78.49	30.114	75.79
29.865	85.06	29.892	84.87	29.920	83.56	29.986	80.73	30.053	78.14	30.107	75.92
29.873	84.94	29.890	85.15	29.939	83.27	29.985	80.96	30.061	78.66	30.118	76.28
29.879	85.07	29.883	84.87	29.944	83.66	29.995	81.10	30.079	78.73	30.112	76.37
29.871	84.75	29.899	85.74	29.939	83.14	30.002	79.58	30.089	78.48	30.102	76.38
29.879	84.17	29.891	83.84	—	—	30.001	79.94	—	—	30.112	76.08

The following Table shews the Mean Annual Heights of the Barometer and Thermometer at Madras, between the Years 1796 and 1821, with the General Mean of each.

YEAR.	BAROMETER.	THERMOMETER.
	Inches.	Deg.
1796	29·981	80·780
1797	29·948	83·430
1798	29·974	81·744
1799	29·988	81·430
1800	29·966	81·680
1801	29·966	81·354
1802	29·968	82·938
1803	30·006	82·571
1804	30·007	83·580
1805	30·067	82·046
1806	29·966	81·705
1807	29·923	79·738
1813	29·831	82·055
1814	29·891	81·304
1815	29·919	81·313
1816	29·972	80·434
1817	29·999	81·059
1818	29·950	81·088
1819	29·949	81·596
1820	29·950	81·546
1821	30·035	82·330
General Mean ..	29·964	81·700

The subjoined Table shews the Mean Monthly Heights of the Barometer and Thermometer, between the Years 1796 and 1821, with the Heights of the Hygrometer and the Mean Fall of Rain.

MONTHS.	Mean Monthly Height for 21 Years, between 1796 and 1821.		Hygrometer, between 1819 and 1823.	Mean Fall of Rain for 13 Years, between 1803 and 1821.	
	Barometer.	Thermometer.		Including the whole Fall during Storms.	Fall in Storms reduced to the Mean Fall.
	Inches.	Deg.	Dry.	Inches.	Inches.
January.	30·085	75·168	13·0	0·608	0·608
February.	30·076	77·157	17·5	0·127	0·127
March.	30·041	79·920	17·5	0·538	0·538
April.	29·955	82·417	18·0	0·384	0·384
May.	29·851	86·918	20·9	1·419	0·121
June.	29·861	88·159	28·9	0·646	0·746
July.	29·867	85·645	28·6	3·303	3·303
August.	29·879	84·732	18·8	3·552	3·552
September ...	29·908	83·825	15·5	4·824	4·824
October.	29·942	81·858	17·6	11·294	11·294
November.	29·956	78·672	7·9	14·803	14·803
December.	30·074	78·843	18·2	8·618	6·048
Mean.	29·958	81·693	18·5	50·124	46·348

We find upon examination of the first of the three Tables, that the hottest day at Madras, by the mean of all the daily observations during twenty-one years, is the 15th of June; when the mean height of the thermometer in the twenty-four hours is $89^{\circ}19'$; the mean varying in different years from $95^{\circ}1'$ to $81^{\circ}6'$. The coldest day is the 9th of January; the mean height of the thermometer on that day being $74^{\circ}59'$; and the mean varying from $77^{\circ}1'$ to $71^{\circ}7'$. About the 20th of March and the 20th of October the thermometer is at its mean height.

The mean height of the thermometer, as deduced from the mean monthly heights, is $81^{\circ}7'$: the greatest extreme of heat was $104^{\circ}5'$; the least height of the thermometer 64° ; the former occurred in the year 1815 at 2 P.M. on the 19th of May, a hot land wind blowing; and the latter on the 12th January 1819, at about sun-rise; such extremes, however, are rare, the thermometer at Madras being seldom higher than 98° or lower than 67° .

The hottest time of the twenty-four hours at Madras, taking the mean of the twelve months, is about three-quarters of an hour past noon ; this varies at different times of the year from 11 A.M. to 3 P.M. The coolest time of the twenty-four hours is about half an hour after four in the morning ; and the thermometer is usually at the mean height a little after seven in the evening, and about nine in the forenoon.

The following statement shews the average times of the greatest, least, and mean heat during each month ; and is formed from the diary in 1823 for every hour :

H E A T.

MONTHS.	GREATEST.	LEAST.	MEAN.	
	Afternoon. H.	Morning. H.	Evening. H.	Forenoon. H.
January	1·3	4·3	7·2	9·2
February	12·	5·3	7·2	8·8
March	12·3	5·0	7·4	8·7
April	12·	4·7	7·2	8·6
May	11·3 A.M.	4·1	6·4	8·5
June	2·	4·3	7·8	8·8
July	2·3	4·	6·6	9·6
August	2·	3·	7·5	8·9
September ..	2·	4·3	7·9	8·6
October	12·	4·8	6·7	8·7
November ..	12·3	5·7	6·4	8·8
December ..	12·7	5·3	8·6	9·5
Mean ..	12·8	4·6	7·2	8·9

According to the mean of the hygrometer during the year 1823, the atmosphere at Madras is least moist at about two o'clock in the afternoon ; is most moist at a quarter before six in the morning ; and is in a mean state at a quarter past nine at night, and a quarter past ten in the forenoon. The following abstract from the hourly diary in 1823, shews the average times when the atmosphere has the greatest, least, and mean moisture for each month :

ATMOSPHERE.

MONTHS.	MOST DRY.	LEAST DRY.	IN A MEAN STATE.	
	Afternoon. H.	Morning. H.	Night. H.	Forenoon. H.
January	1·5	6·	7·5	12·7
February	5·7	7·8	12·3	11·7
March	5·3	6·2	10·4	10·5
April	12·2	4·7	8·7	9·3
May	11·9	5·8	7·7	8·6
June	1·3	1·3	7·4	9·9
July	2·7	6·5	8·2	10·4
August	10·7	5·7	9·	10·6
September ..	1·7	5·3	9·9	10·
October	2·3	5·5	7·4	8·8
November ..	3·2	8·	10·3	11·3
December ..	3·	5·2	11·	10·4
Mean ..	2·1	5·7	9·2	10·3

The barometer is highest at Madras upon a mean of years on the 3d of January, and lowest about the end of May; the range being from 30,194 to 29,834 inches; but in the storms that have occurred of late years, the barometer was depressed in an extraordinary degree for that place, as I shall more particularly notice before I close these remarks.

The barometer is 0·142 inches higher, and the thermometer 7°·18 lower, in the N.E. monsoon than in the S.W., as will appear by the following statement:

Mean Height of the Thermometer and Barometer, during the N.E. and S.W. Monsoons, between 1796 and 1821.

N.E. Monsoon between 1796 and 1821.			S.W. Monsoon between 1796 and 1821.		
Months.	Thermometer.	Barometer.	Months.	Thermometer.	Barometer.
	Deg.	Inches.		Deg.	Inches.
October ..	81·858	29·942	April ..	82·417	29·955
November ..	78·672	29·956	May ..	86·918	29·851
December ..	75·843	30·074	June ..	88·159	29·861
January ..	75·168	30·085	July ..	85·645	29·867
February ..	77·157	30·076	August ..	84·732	29·879
March ..	79·920	30·041	September ..	83·825	29·908
Mean ..	78·103	30·029	Mean ..	85·283	29·887
				78·013	30·029
			Difference	7·180	0·142

WINDS AND WEATHER AT MADRAS.—The division of the winds dependent upon the place of the sun, is into the N.E. and S.W. monsoons. The N.E. monsoon, taking the mean of years, sets in on the 19th of October,* and ends about the 2d of March, heavy rains falling sometimes for several days together from its commencement to the middle of December, attended at times by gales of wind; after which, till the close of this monsoon, the air is generally clear and cool, and the weather pleasant. The mean fall of rain during the monsoon season, as this is termed, is about 33 or 34 inches. The fall in the year, as given in a foregoing statement, is 50·214 inches, including the fall during the storms which have occurred of late years; but only about 46·35 inches, if we reduce that fall to the fall of ordinary years. The statement just alluded to shewed the fall of rain for thirteen years; in the following, some years are added, making altogether eighteen years.

The following shews the mean monthly fall of rain at Madras, from the beginning of the year 1803 to the end of 1825, including the fall during the storms:

Mean Fall of each Month in 18 Years.						
						Inches.
January	..	..	..	..	..	0·737
February	..	..	..	..	..	0·099
March	..	..	..	..	..	0·469
April	..	..	..	..	..	0·333
May ..	..	..	..	..	..	1·354
June ..	..	..	..	..	..	0·854
July ..	..	..	..	..	..	2·945
August	..	..	..	..	..	3·883
September	..	..	..	..	..	4·359
October	..	..	..	..	..	12·273
November	..	..	..	..	..	13·937
December	..	..	..	..	..	7·522
Mean Fall annually						Inches 48·755

If the fall during the storms be allowed for, the yearly fall will be 46 inches, or about one-third of an inch less than that before given for thirteen years.

The south wind commences about the 2d of March, and blows along the shore, bringing with it a great degree of dampness, and having at the same time a sultriness, which, combined with the damp, make it much complained of; this wind blows, according to the average standard before-mentioned, till the 29th of April, when there are sometimes for a week or two land or S.W. and Westerly winds; and at other times South and South-easterly winds. The land wind sets in about the 16th of May, and continues blowing, and generally with a great degree of heat, during some weeks, cooled

* This agrees nearly with the usual practice, which is to lower the flag-staff of the Fort at Madras on the 15th of October, when the stormy season is considered to commence. It is hoisted again on the 15th December; after which it is supposed ships may approach the coast with safety.

at intervals, however, by showers; it afterwards prevails only in the night, and in the early part of the forenoon, when during the remainder of the day its place is supplied by the S.E. or sea breeze.

About a month or more before the change of the monsoon and commencement of the rains, the wind is variable, with calms and a sultry and oppressive state of the atmosphere.

I have given the average times of the commencement of the monsoons; but there are considerable variations in a stated period of years; in the interval under review, for example, the N.E. monsoon and rains set in one year as early as the 29th September; and another year as late as the beginning of November. The land wind also has commenced at one time as early as the end of April, and has kept off at another time till the beginning of June. Respecting the state of the atmosphere, the results of these meteorological observations shew it is not quite so clear and serene as is commonly supposed; the mean of twenty-six years, giving us during the sun's revolution, only one hundred and eighty clear days; the remainder of the year is made up of sixty-four days clear in some part of the twenty-four hours, and the other part cloudy or hazy: of ninety-six cloudy days, and twenty-five hazy; there are also during the year fifty-seven, on which rain falls; thirty-one, when there is a dew, and only eighteen with lightning.

The following statement, being the mean of the details of the weather in the diary for the foregoing period of twenty-six years, shews how this state of the atmosphere was divided among the different months. This was constructed from a great mass of detail:

MONTHS.			Clear.	Cloudy.	Hazy.	Clear, Hazy, Cloudy.	Rain.	Dew.	Lightning.
			Days.	Days.	Days.	Days.	Days.	Days.	Days.
January	..	..	20	6	1	4	1	7	—
February	..	..	24	1	1	2	—	9	—
March	..	..	27	1	—	3	—	7	—
April	..	..	24	2	1	3	1	2	2
May	..	..	19	4	2	6	2	—	4
June	..	..	8	11	2	9	6	—	3
July	..	..	6	13	5	7	8	—	2
August	..	..	8	12	3	8	7	—	2
September	..	..	9	10	4	7	7	—	3
October	..	..	11	12	3	5	10	2	2
November	..	..	11	13	2	4	9	2	—
December	..	..	13	11	1	6	6	2	—
Annually by the Mean			180	96	25	64	57	31	18

The climate of Madras is generally healthy, and the thermometer during the hot season, not higher than at most other parts of the coast, nor indeed so high as at some

places; the country is flat for miles, and the soil sandy. What was formerly a plain of sand, reaching from the sea several miles inland, is now covered with habitations (many of a superior order) and gardens; with one of the finest roads in the world running through it, a distance to St. Thomas's Mount of about nine miles, and some way on, to the new cantonment. Madras, like most other places in India, has been visited with that dreadful malady, the *cholera*, as it is termed; to which many, both Europeans and natives, have fallen victims.

GALES OF WIND AND STORMS.—Gales of wind at Madras usually occur only during the rainy season, between the 15th of October and the middle of December; the barometer seldom sinks much more than four-tenths of an inch, or stands lower than 29.45 inches. These gales begin rather to the westward of north along the shore, veer to the eastward, and increase in violence as they get round; this change of direction continues, the wind gradually abating, until it is at south, when it frequently falls almost calm. From what has been just stated, the necessity for ships in Madras roads getting under weigh immediately a gale commences is apparent; as when the wind has veered easterly, it is next to impossible to get sea-room, and the vessels must be driven on shore.

I shall proceed to give some particulars of gales occurring during the period comprised in the diary.

On the 27th of October 1797, the moon having just passed the first quarter, and being at her greatest distance from the earth, there was a violent gale of wind at Madras, somewhat resembling the storms of late years; it began from the northward in the night between the 26th and 27th, veered to the N.E., and in the morning blew with uncommon violence during three hours. About noon it suddenly shifted to the south, and was almost as violent as before—many old trees were torn up by the roots, and the leaves on the north side of those much exposed, were either blown off, or completely withered. The barometer began to fall at about noon on the 25th, and at 2 o'clock P.M. on the 27th had sunk to 29.465 from 30.005, or about 0.54 of an inch. This, though not so violent as the late storms, was no ordinary gale of wind.

On the 10th of December 1807, the moon half-way between the first quarter and full, and nearly at the greatest distance from the earth, there was a gale at Madras. It began in the evening from the north, and was attended with thunder, lightning, and rain; veering to the southward of east, and blowing with violence, it slackened gradually after noon, and at 13 P.M. the sky was again clear. The barometer fell about 0.4 of an inch; rain $3\frac{1}{2}$ inches. On the night between the 29th and 30th of March 1820, a strong gale of wind occurred; the moon at the full, but nearly at her greatest distance from the earth. This gale commenced from N.E. and blew with great violence at times; contrary to the course of the monsoon gales, it veered to the North, N.W., and S.W. Still violent; but at the latter quarter it gradually slackened, and broke up at about 9 A.M. The barometer fell 0.40 of an inch, and was a little above 29.5 when at the greatest depression: about $6\frac{1}{2}$ inches of rain fell. The ships left the roads in the evening; but some of the smaller craft were driven on shore, and others went down at

their anchors. Several ships and smaller vessels were lost along the coast during the gale, which appears to have been more violent to the northward than at Madras.

The storms we have had of late years at Madras resemble whirlwinds, blowing all round the compass (from particular points with incredible fury), and are generally confined to a space comparatively small in diameter. I shall also endeavour to give some of the leading features of these.

On the 2d of May 1811, a violent storm occurred at Madras; the moon had passed the first quarter on the 30th of April, and was full on the 8th of May, and was also at her greatest distance from the earth. This storm raged with great fury, and did considerable mischief: I was in England at the time, but it appears, from what I can collect, to have begun from the northward, and to have blown equally strong from the East, S.E. and South. I did not, however, find the details in the diary; the barometer also was so much out of order, that nothing can be correctly stated regarding the actual quantity of depression.* The fall of rain was about five inches and a-half. It appears from the notices published at the time, that early on the 1st of May the surf was observed to be unusually high, while thick clouds continued to gather during the day from the N.E.; and that by day-light on the second the wind blew very hard, accompanied by heavy rain. About noon it increased, and towards midnight had arrived at its greatest height, when it blew with incredible fury. A friend who was at the presidency at the time, and who had great reason to recollect this storm, informs me, that raging with the greatest fury, it destroyed every vessel in the roads, with the exception of three, a small Spanish ship, an American, and a French cartel ship. These stood out to sea, but the former was driven on shore near Covelong; ninety country vessels went down at their anchors, and all the rest were driven on shore, along with the Dover frigate and Chichester store-ship; the whole beach having been covered with wreck and dead bodies for two miles north and south of Madras. The papers stated that the storm was not felt at the distance of forty miles from Madras.

On the 24th of October 1818, a second violent storm occurred at Madras. The moon had passed the last quarter about two days, and was nearly at her greatest distance from the earth: the wind, which was a strong northerly gale early in the morning, before ten in the forenoon had increased to a storm. An awful pause of half an hour occurred about this time; after which it blew a complete hurricane from the south, with a fury never perhaps before experienced at Madras. Some of the oldest trees, which had resisted the former storm, were rooted up; and the largest branches of others were torn off by the force of the wind. In some trees of a tough description of wood, such branches were seen hanging down and twisted, having been whirled round and round by the fury of the storm. Such a scene of desolation was presented as had hardly been witnessed at Madras; numbers of native habitations were levelled, many of the larger buildings injured, and some lives lost: several ships and brigs were at anchor in the roads. All

* The depression shewn does not appear to have been two-tenths of an inch, and consequently the instrument had scarcely any action.

these got under weigh, but the latter were driven on shore, and one of the ships foundered; another was driven on shore to the northward, and a third rendered unseaworthy, while the others generally sustained great damage. The fall of rain was about five inches. The barometer had fallen between eight o'clock P.M. of the 23d and day-light of the 24th, nearly three-tenths of an inch, standing at about 29.5; but during the awful lull at 10 A.M. it was at 28.780 inches, a most extraordinary and terrific depression, such as I never before heard of at Madras: towards noon it had risen about half an inch, and at sun-set was at 29.65 inches.

On the 9th of May 1820, another storm occurred at Madras; the moon having been between the third quarter and new, but at her nearest approach to the earth; it commenced in the evening of the 8th, in a gale from the N.W., increasing and blowing very strong before morning, accompanied by torrents of rain. Violent gusts continued all day of the 9th, when the wind began to shift round to W. and S.W., blowing with greater violence, if possible, than before, and the rain still falling in torrents. Before noon on the 10th, the violence of the storm had subsided. This storm was of far longer duration than either of those that preceded it, but like them, accompanied by torrents of rain, and veering to different points of the compass. The damage on shore was great and distressing; very many lives were stated to have been lost by this awful visitation, at and in the vicinity of the presidency; most of the ships put to sea early, but great destruction took place among the smaller vessels: only one ship was lost: the tanks burst, and the rivers overflowed in all directions, to the great destruction of property. This storm appears to have had a wider range than the former. The barometer, which on the 8th in the forenoon was at 29.750 inches, had fallen at sun-rise on the 9th to 29.400 inches; by noon, on the same day, to 29.135 inches; and at 3 P.M. it was at 28.816 inches; and at 5 at 28.670 inches, lower even than during the former storm. By sun-rise, on the 10th, it had risen to 29.633 inches; and before noon, on that day, to the accustomed height of the time of the year. Between the 8th at night, and the 10th at sun-rise, about 16 inches of rain fell.

It may probably appear somewhat extraordinary to those who consider the moon as having great influence in gales and storms, that at the times above noticed she was always (with one exception only) in a part of her orbit, when I believe she is considered by those just alluded to, as having the least influence. In one gale only was the moon at full, having also been mostly at the greatest distance from the earth.

In four of the above instances the moon, upon a mean, passed the meridian at 30 degrees south of the zenith of Madras; in three instances she passed at six degrees south, and the remaining two within about a degree to the northward; and if one were inclined to draw any conclusion from the circumstances under which these gales and storms occurred, it might be, to ascribe to the moon a protecting power against such visitations, instead of aiding to produce them; having been generally far removed from the earth at the time, and not in that part of her course where, acting in combination with the sun, she might be supposed to have the greatest influence.

4th January 1830.

APPENDIX, No. IV.

DONATIONS

TO THE

Royal Asiatic Society of Great Britain and Ireland.

DONATIONS OF BOOKS, &c.

- By F. A. C. WAITZ, M.D., C.M.R.A.S.....*Dec. 5, 1829.*
His "Hydrargyromanie en Haematomanie." 8vo. Amsterdam, 1829.
- By Mons. J. C. V. LEVASSEUR, M.A.S.Par.....*Dec. 5, 1829.*
The original Text of the first two Chapters of "*Iu-kiao-li*," or "The Two Fair Cousins," a Chinese Romance. 8vo. Paris, 1829. Lithog.
- By JOHN MARTIN, Esq.*Dec. 5, 1829.*
An Impression of each of the following of his Engravings:
Belshazzar's Feast.
Joshua commanding the Sun to stand still.
The Deluge.
With explanatory letter-press.
An Account of several Inventions by Mr. Martin. 4to.
- By Lieut. ALEX^R. BURNES*Dec. 5, 1829.*
His Memoir of a Map of the Eastern Branch of the Indus. Bombay, 1829, folio.
Lithog. (Since printed in the *Trans. R.A.S.* Vol. III. p. 550.)
- By the Rev. H. D. LEEVES.....*Dec. 5, 1829.*
A MS. Roll, in Turkish, being the Imperial Firmán confirming the Election of the Greek Patriarch of Constantinople, richly illuminated, and written with ink of various colours.

- By the Marquis FORTIA D'URBAN, M.A.S.Par.....Dec. 5, 1829.
Inscription Phœnico-Grecque, découverte à Cyrène. Paris, 1829.
- By Professor A. W. VON SCHLEGEL and Professor CHRISTIAN LASSEN, F.M.R.A.S.
Dec. 5, 1829.
Hitopadesas, id est, Institutio Salutaris. 4to. Bonnæ, 1829-31.
- By RICHARD CLARKE, Esq., M.R.A.S.Dec. 5, 1829, &c.
A Dictionary of the High Tamil Language, by Father Beschi. 2 vols. 4to. MS.
Ganita Dipikei; a System of Arithmetic in Tamil. 8vo.
In the Privy Council: Appeal from Bombay. Luximon Row Sadasew, Appellant,
and Mulhar Row Bajee, Respondent—Case of the Appellant, Case of the Re-
spondent, and Appendix; folio.
- By Lieut.-Colonel C. J. DOYLE, M.R.A.S.Dec. 5, 1829.
A beautifully-written copy of the *Korân*, on a roll, richly gilt, marginal lines, and
illuminated titles; with a silver case to suspend at the girdle.
A manuscript copy of the *Dévi-Máhâtmyam*, an episode of the *Márhandeya-Purâna*, on
a roll, with highly-finished illustrative paintings, and richly-illuminated borders.
- By the CAMBRIDGE PHILOSOPHICAL SOCIETY.Dec. 5, 1829, &c.
Transactions of the Cambridge Philosophical Society Vol. 3 to Vol. 5, Part I. 4to.
Cambridge, 1829-33.
Charter and Bye-Laws of the Cambridge Philosophical Society. 8vo. Cambridge,
1832.
- By Lieut.-Colonel WM. M. G. COLEBROOKE, M.R.A.S.Dec. 5, 1829.
A Collection of Pamphlets on East-Indian Affairs, 5 vols. 8vo. London, 1812.
A Commentary upon Abdurrahman Jorjani's Treatise on Arabic Grammar. MS.
4to. Arabic.
A Treatise of Scholastic Divinity, being an Exposé of the tenets of the Shafai Sect,
by Muhammed Zain, son of Jelal-ad-dín of Achín. MS. 4to. Malayan.
Fac-Similes of Inscriptions found on Rocks in the District of Batikaloa, in Ceylon,
1 sheet, folio, MS. (Vide *Trans. R.A.S.* Vol. 3, p. 383.)
A Chinese book, printed.
- By the late GODFREY HIGGINS, Esq., M.R.A.S.Dec. 5, 1829.
His Apology for the Life and Character of the celebrated Prophet of Arabia, called
Mohamed, or the Illustrious. 8vo. London, 1829. (2 copies.)
Horæ Sabbaticæ; or, an Attempt to correct certain Superstitious and Vulgar Errors
respecting the Sabbath. By Godfrey Higgins, Esq. 12mo. London, 1833.
- By Major-General THOS. HARDWICKE, M.R.A.S.Dec. 5, 1829, &c.
A framed Drawing of the celebrated Temple of Jaggannát'ha, in Kuttak.
A Ground Plan of ditto.
A framed Drawing of the Temple, called the Black Pagoda, near the Temple of
Jagganná'tha.

By Major-General THOS. HARDWICKE.—(Continued.)

An original Painting, from Sketches by a Native Artist, of the Sheep-eater, as he exhibited at Fattahgurh in 1796.

A coloured lithographic Print of the same, with explanation.*

Sixteen Volumes of Sanscrit MSS.

By the COMMITTEE of PUBLIC INSTRUCTION, CalcuttaDec. 5, 1829, &c.

The Moolukhkhush ool Tuwareekh : an abridgment of the Seir Mootakherin; prepared by Maulavi Abdool Kerim. 4to. Calcutta, 1827.

Futawa Alemgiri; Opinions and Precepts of Mohammedan Law; compiled by Sheikh Nizám. 3 vols. 4to. Calcutta, 1828.

The Moojiz ool Qanoon; a Medical Work by Ibn ool Nufees. 4to. Calcutta, 1828.

The Bhásha Parich'heda, and Sidd'hanta Muktavali; a Treatise on Logic, with its Commentary, by Viswanát'ha Panchanána Bhátta. 8vo. Calcutta, 1827.

Bhátta Kavya; a Poem on the Actions of Ráma, with the Comments of Jayamangala and Bhárata Mallika. 2 vols. 8vo. Calcutta, 1828.

The Lilávati, in Persian, by Feizi; from the Sanscrit of Bháscara Achárya. 8vo. Calcutta, 1827.

Sahitya Derpana; a Treatise on Historical Compositions, by Viswanát'ha Kavirája. 8vo. Calcutta, 1828.

Selections, descriptive, scientific, and historical; translated from English and Bengálí into Persian. 8vo. Calcutta, 1827.

Nyáya Sutra Vritti; the Logical Aphorisms of GÓTAMA, with a Commentary, by Viswanát'ha Bhatt'áchárya. 8vo. Calcutta, 1828.

The Laghu Kaumudi; a Sanscrit Grammar, by Vadarájá. 8vo. Calcutta, 1827.

The Mughabodha; a Sanscrit Grammar, by Vópadiva. 8vo. Calcutta, 1827.

The Mejmuá Shemsi; a Summary of the Copernican System of Astronomy. 8vo. Calcutta, 1826.

The Kávyá Prakása; a Treatise on Poetry and Rhetoric, by Mammata Achárya. 8vo. Calcutta, 1829.

A short anatomical Description of the Heart, translated into Arabic, by John Tytler. 8vo. Calcutta, 1828.

Daya Crama Sangraha; a Compendium of the Order of Inheritance. 8vo. Calcutta, 1828.

Vyávahára Tatwa; a Treatise on Judicial Proceedings. 8vo. Calcutta, 1828.

Dáya Tatwa; a Treatise of the Law of Inheritance. 8vo. Calcutta, 1828.

The Ch'hutru Prukash; a biographical Account of CH'HUTRU SAL, Rájá of Boondelkhund, by Lal Curr. 8vo. Calcutta, 1829.

Dáya Bhága; or the Law of Inheritance. 8vo. Calcutta, 1829.

* See *Trans. R.A.S.* Vol. III. p. 379.

- By Professor GARCIN DE TASSY, F.M.R.A.S.Dec. 5, 1829, &c.
 His Rudimens de la Langue Hindoustání. 4to. Paris, 1829.
 Mémoire sur des Particularités de la Religion Musulmane dans l'Inde, d'après les
 Ouvrages Hindoustání. 8vo. Paris, 1831.
 Mémoire sur le Système Métrique des Arabes, adapté à la Langue Hindoustání.
 8vo. Paris, 1832.
 Appendice aux Rudimens de la Langue Hindoustání, contenant, outre quelques
 additions à la Grammaire, des Lettres Hindoustání Originales, accompagnées
 d'une Traduction et de Fac-simile. 4to. Paris, 1833.
- By Dr. PINCKNEYDec. 5, 1829.
 A leaf of a Burmese book written in the square Páli character.
- By the IMPERIAL RUSSIAN MINISTRY for FOREIGN AFFAIRS, St. Petersburg
 Dec. 5, 1829, &c.
 History of the First Kháns of the House of Chingis. By Father Hyacinth. 8vo.
 St. Petersburg, 1829. Russian.
 Description de Peking, avec un Plan de cette Capitale; traduit du Chinois en
 Russe par le R. P. Hyacinth; et traduit du Russe en Français par Ferry de
 Pigny. 8vo. St. Petersburg, 1829.
 A Description of Peking, translated from Chinese into Russian, by Father Hyacinth.
 8vo. St. Petersburg, 1829.
 San-tse-king; with a Translation and Commentary in Russian; by the Monk
 Hyacinth. 4to. St. Petersburg, 1829.
 History of Tibet and Kukunor, translated from the Chinese by the Monk Hyacinth
 Bitchourin. 2 vols. 8vo. St. Petersburg, 1833. Russian.
 Opisanie Kirgis-Kaisakih Orda i Stepei.—Description des Hordes et des Steppes
 des Kirguis Kaisaks; par M. Levshine. 3 vols. 8vo. St. Petersburg, 1832.
- By the Ritter VON HAMMER, F.M.R.A.S.Dec. 5, 1829.
 His Eclaircissemens sur l'Histoire des Arabes, &c. 8vo. Paris, 1829.
 Wien's Turkische Belagerung, vom Jahre. 1529. 8vo. Pest, 1829.
 Notizia di diciotto codici Persiani. 4to. 1825.
 Lettere sui Manoscritti Arabi. 8vo. Milan, 1827.
 Geschichte des Osmanischen Reiches; Band 6 to 9. 8vo. Pest, 1830-33.
 Jahrbucher der Litteratur, &c. 8vo. 1831.
 Die Kriege in Bosnien in den Feldzugen, 1737-9; from the Turkish of Kadi Omar
 Effendi; by J. N. Dubsky. 12mo. Wien, 1789.
 His Uebersicht von drey-und sechsigen Werken Arabischer Persischer und Turkischer
 Literatur. Part 3. 8vo. Vienna, 1831.
 Μαρκου Αντωνινου Αυτοκρατορος των εις εαυτον Βιβλια ιβ' Περσιςτι Μεθερμηνευσαντος, Ιωσηφ Αμμερ.
 Greek and Persian, 8vo. Vienna, 1831.
 Wiener Zeitschrift fur Kunst, Literatur Theater und Mode. No. 58, 8vo. 1831.

By the Ritter VON HAMMER.—(Continued.)

Lettere sui Manoscritti Orientali e particolarmente Arabi che si trovano nelle diverse Biblioteche d'Italia, del Sig.^r Cons.^r Giuseppe de Hammer, Lettere vii. viii. ix. ed ultima, 8vo.

Verzeichniss von Hammer's handschriftlicher Sammlung Orientalischer Werke über Osmanische Geschichte. 8vo. Wien, 1832.

By the BRITISH and FOREIGN BIBLE SOCIETY:.....*Dec. 5, 1829, &c.*

The Gospels in Coptic and Arabic. 4to. London.

The Acts of the Apostles and the Epistles in Amharic. 4to.

The New Testament in Judeo-Spanish. 8vo. 1829.

The New Testament in Negro-English. 8vo. London, 1829.

The New Testament in Syriac and Carshunic. 4to.

The Gospels in Chaldaic. 4to.

The New Testament in Carshunic. 4to.

The Book of Psalms, translated into the Esquimaux Language. 12mo. London, 1830.

By Professor BOPP, F.M.R.A.S.*Dec. 5, 1829, &c.*

His Grammatica Critica Linguae Sanscritae. 4to. Berolini, 1829-32.

Diluvium cum tribus aliis Maha-Bharati præstantissimis Episodiis. 8vo. Berolini, 1829.

Glossarium Sanscritum. 4to. Berolini, 1830.

Über Einige Demonstrativstämme und ihrem Zusammenhang mit verschiedenen Präpositionen und Conjunctionen im Sanskrit. 4to. Berlin, 1830.

Nalus, Maha-Bharati Episodum; textus Sanscritus cum interpretatione Latinâ et Annotationibus criticis. 8vo. Berolini, 1832.

By Professor EUGENE BURNOUF, F.M.R.A.S.*Dec. 5, 1829, &c.*

Extrait d'un Commentaire et d'une traduction nouvelle du Vendidad Sadé. 8vo.

Vendidad Sadé, un des livres de Zoroastre; texte Zend. Vols. 2 to 8. Folio, Paris, 1831.

Commentaire sur le Yaçna, un des livres Liturgiques des Parses. 4to. Paris, 1833. (Avant propos.)

By RICHARD TAYLOR, Esq., F.L.S., M.R.A.S. *Dec. 5, 1829.*

His Edition of Tooke's Diversions of Purley. 2 vols. 8vo. London, 1829.

An Essay on Hebrew Poetry, Ancient and Modern; by Philip Sarchi, LL.D., M.A.S. Par. &c. 8vo. London, 1824.

By HORACE HAYMAN WILSON, Esq., M.R.A.S. Sec. As. Soc. Cal.*Dec. 5, 1829, &c.*

His Review of the External Commerce of Bengal, from 1813-14 to 1827-8. 8vo. Calcutta, 1830.

His Edition of the Sanscrit Text of the Mrichchakati, or the Toy Cart; a Comedy. 8vo. Calcutta, 1829.

By HORACE HAYMAN WILSON, Esq.—(Continued.)

His descriptive Catalogue of the Oriental MSS. &c. collected by the late Lieut.-Col. Colin Mackenzie. 2 vols. 8vo. Calcutta, 1828.

Múdra Rakshasa, or the Signet of the Minister, a Drama in seven Acts, by Visákha Datta; with a Commentary explanatory of the Prákrit Passages. 8vo. Calcutta, 1831.

Vikramorvasi, or Vikrama and Urvasi; a Drama by Kálidása, &c. 8vo. Calcutta, 1830.

Uttara Ráma Cheritra, or a Continuation of the History of Ráma; a Drama, in seven Acts, by Bhavabhúti, &c. &c. 8vo. Calcutta, 1831.

Málati and Madhava, a Drama, in ten Acts, by Bhavabhúti. 8vo. Calcutta, 1830.

By ROBERT GOUGER, Esq.Jan. 2, 1830.

His Letter from Sydney, the principal Town of Australasia. 12mo. London, 1829.

By the AUTHOR.....Jan. 2, 1830.

Examination of the Government of British India. 8vo. London, 1829.

By Mr. JAMES MITCHELL, Assist. Sec. R.A.S.Jan. 2, 1830, &c.

A Lithographed Portrait of Mirza Mohammed Alí, the Persian Convert to Christianity; now Mirza Alexander Kasem Beg, of Kasan.

Collezione Completa di tutti i Costumi Militari della Truppe Ottomane; folio, Constantinople, 1830.

The Korán in Arabic, printed at Kasan by the Mahommedans, for the first time. Folio, 1809.

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 Nos. 21 and 28 of the Westminster Review. 8vo. London, 1829 and 1831.
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- By Messrs. COLNAGHI, SON, and Co. *Dec. 1, 1832.*
 A Portrait of George Bellas Greenough, Esq., F.R.S., M.R.A.S., &c. &c., folio, lithog.
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 A MS. on palm leaves, in the Singhalese character.
 A complete fac-simile of the Divan, or sacred Books of the Sabeans, or Christians of
 St. John, made from the Autograph of F. Ignatius a Jesu (the first person who
 made Europe acquainted with that sect), which is preserved in the Archives of the
 Propaganda at Rome: it is a roll nearly twenty-five feet in length, containing a
 number of figures illustrative of the Sabeian Mythology, accompanied by large por-
 tions of text.

- By the late ARTHUR LUMLEY DAVIDS, Esq..... *Dec. 1, 1832.*
De Fatis Linguarum Orientalium Arabicæ nimirum Persicæ et Turcicæ Commentatio.
Folio, Viennæ, 1780.
 F. à M. Meninski *Institutiones Linguae Turcicæ, etc., curante C. F. Collar.* 4to.
 2 tom. in 1. *Vindobonæ, 1756.*
Grammaire Turque, ou Méthode courte et facile pour apprendre la Langue Turque
(par Holdermann). 4to. *Constantinople, 1730.* The first work in French and
 Turkish printed at Constantinople.
 J. C. Clodii *Compendiosum Lexicon Latino-Turcico-Germanicum.* 12mo. *Lipsiæ, 1730.*
 A Grammar of the Turkish Language, by Thomas Vaughan, late of Smyrna. 12mo.
 London, 1709.
- By Miss MARIA FORBES.....*Dec. 1, 1832.*
 Fac-simile of a Phœnician Inscription on stone, found near Citta Vecchia, in the
 island of Malta; with a version in Hebrew characters, and a translation in Italian,
 by the Rev. Signor Marmara; the whole copied by Miss Forbes.
 Drawing of a square brass Plate, representing two figures seated under an arch, with
 a bust between them; and having two characters in the centre of the base: this
 Plate was found recently near Citta Vecchia; the drawing is of the size of the
 original, and is by Miss Forbes.
- By Lieutenant A. BLIN, of the N. Infantry, Pondicheri *Dec. 15, 1832.*
 His "Dictionnaire Français Tamoul et Tamoul Français, &c." Oblong 8vo. Paris,
 1831.
- By Monsieur ADRIEN BALBI, F.M.R.A.S.....*Dec. 15, 1832.*
 His "Abrégé de Géographie redigé sur un nouveau plan d'après les derniers traités
 de Paix, et les découvertes les plus récentes," &c. 8vo. Paris, 1833.
 The World compared with the British Empire. By Monsieur A. Balbi. A sheet,
 coloured. Paris, 1832.
- By the Rev. NARSES LAZARIEN *Dec. 15, 1832.*
 A Brief Account of the Mechitaristicon Society, founded on the Island of S. Lazaro,
 at Venice. 8vo. Venice, 1825.
 Souvenirs d'un Séjour à Brousse en Bithnie, dans l'année 1825, par J. M. Jouannin.
 8vo. Paris, 1829.
- By BURY HUTCHINSON, Esq. *Dec. 15, 1832.*
 Cursory Observations on the Report from the Select Committee of the House of Com-
 mons on the Travancore Petition. 8vo. London, 1832. 2 copies.
 A Bill for providing for the Discharge of a Debt due from the Rajah and Government
 of Travancore to the representative of the late John Hutchinson, Esq. 3 Will. IV.
 1833.
 Correspondence between Mr. B. Hutchinson, the Board of Control, and the East-India
 Company since the Report from the Select Committee of the House of Commons in
 August, 1832.

- By HENRY T. MARSHALL, Esq. *Jan. 5, 1833.*
 Contribution to a Natural and Economical History of the Cocoa-Nut Tree; by Henry Marshall, Deputy Inspector General of Hospitals. 8vo. Edinburgh, 1832.
- By Lieutenant-Colonel W. H. SYKES, M.R.A.S. *Jan. 19, 1833.*
 A Catalogue of the Mammalia and Birds observed in Dukhun, East-Indies; by Lieutenant-Colonel W. H. Sykes, F.L.S., &c. &c. 8vo. London, 1832.
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 A Drawing of the colossal Jaina Statue, sculptured in granite on the summit of a hill at Sewanabalagola, near Chenroyapatam, in Mysore; copied from an original sketch by Samuel Daniell, Esq.: estimated height of the figure, 65 feet.
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 His "Instructions for making Meteorological Observations; with forms of Tables, &c." 4to. Lithog. Madras, 1832.
 His "Observations on the Cholera." 8vo. Edinburgh, 1828.
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 Compte rendu des Travaux de l'Ecole de Médecine d'Abou-Zabel (Egypte) et de l'examen général des Elèves pour les 1^{ère}, 2^{me}, 3^{me}, 4^{me}, et 5^{me} années de sa fondation A.H. 1242 à 1247—A.D. 1827 à 1832; suivie de l'exposé de la conduite et des travaux de l'Auteur lui-même en Egypte, &c. &c. Par Clot Bey, Chevalier de la Légion d'Honneur, &c. &c. 8vo. Paris, 1833.
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 Reports on the Navigation of the Euphrates; submitted to Government by Captain Chesney. Folio, London, 1833.
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 Anniversaria in Memoriam Reipublicæ Sacræ et Literariæ, celebrandu indicit Regiæ Universitatis Hauniensis Rector cum Senatu Academico; with an engraving of the Iberian and Armenian Alphabets. 4to. Hauniæ, 1832.
 Den forste November og den forste August ved Fin Magnusen, Professor. 8vo. Krobenhavn, 1829.
 Ræsonnert Lappisk Sprogloere, etc. of Rasmus Raske, Professor. 8vo. Krobenhavn, 1832.
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- By Mrs. DAVIDS *April 20, 1833.*
 Lecture on the Philosophy of the Jews, by the late Arthur Lumley Davids, M.A.S.,
 Par.; to which are subjoined three Reviews of his Turkish Grammar, and his Letter
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- By the LINNEAN SOCIETY *April 20, 1833.*
 The Transactions of the Linnean Society of London, Vol. XVI. Part 3. 4to. London,
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 His Histoire du Prix fondé par le Comte de Volney pour la Transcription universelle des Langues en Lettres Européennes régulièrement organisées, et pour l'étude Philosophique des Langues. 4to. Paris, 1833.
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* Vide *Transactions of the Royal Society of Edinburgh*, and *Asiatic Journal*.

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A *Hindú* drawing representing the *Durbar* or levee of DOULAT RAO SINDIA, with portraits of his principal chiefs and ministers; framed and glazed.

A *Hindú* Almanac, written on a roll of canvas, six feet four inches in length.

A cast in glass of a seal bearing the figure of HERCULES, and described by Colonel TOD in the 2d vol. of the *Transactions* of the Society.

An original grant of an estate and various privileges from RÁNÁ URSI of *Mewár*, of which there is a fac-simile and translation in the 1st volume of the *Annals of Rájást'han*, published by Colonel TOD.

By Lieut.-Colonel WILLIAM M. G. COLEBROOKE, M.R.A.S.*Jan. 21, 1832.*

The model of a palanquin and attendants of a Ceylonese man of rank.

Twenty-one models in wood of natives of Ceylon, of various professions and castes.

An original portrait, in oil, of RÁDAMA, the late King of Madagascar; by Mr. A.

COPPALLE, executed in 1826 at *Tananarivoo*, the capital of Madagascar.

The model of a Ceylonese weaver's loom.

The model of a Ceylonese smith's forge.

An ornamental basket, woven from the fibres of the *Ola* plant.

An image of a *Buddhist* priest, carved in wood.

The model of a Ceylonese plough.

By Lieut.-Colonel WILLIAM M. G. COLEBROOKE—(Continued.)

The model of a machine for cleaning cotton ; with the bow.

The model of part of the weaving apparatus.

Ditto ditto.

The model of a Ceylonese bill-hook, called *Koyte*.

The model of a hoe, called *Mamoty*.

The model of an implement for digging up roots, called *Yawutte*.

The model of a sickle.

An iron pin, used in spinning.

An iron stylus, used for writing on the palm leaf.

A boar spear, with brass mounting.

An iron stylus, for writing on the palm leaf ; and a clasp-knife for cutting the leaf, in the same handle.

A brass cup and basin, used in the temples.

Two brass covers for lamps suspended by brass chains and hooks.

A basket full of Areca nuts. (*Areca Catechu*. Linn.)

A basket woven of the *Ola* plant.

By Major HENRY BURNEY, Resident at the Court of Ava, (through George Swinton, Esq. Secretary to Government, Calcutta.).....Feb. 18, 1832.

Specimens of the Lacquered-ware, &c. of the Burmese, viz. :

1. A frame of basket-work for a drinking cup.
2. Ditto, with a coat of plain *theet-tsee* (wood-varnish) applied to the outside after the rim has been cut round.
3. Ditto, with the upper part scraped thinner, and the rim cut smooth ; the hole at the bottom filled up, and a coat of the coarse priming applied inside and outside.
4. The basket-work ground smooth on the lathe, with pumice-stone, red earth, and water.
5. The outside ground smooth as before ; and the inside covered with a coat of the fine priming.
6. The outside covered with fine priming.
7. The outside and inside ground smooth on the lathe with powdered teak-wood, charcoal, water, and a wet cloth.
8. Two coats of the first sort of varnish applied.
- 9 Outside finished with the polishing powder.
10. Inside and outside covered with a coat of the first kind of vermillion.
11. The *Shan Yowan t'ho* before the incisions and hollows of the engravers have been filled up with vermillion.
12. Ditto, completed, and a coat of the semi-transparent mixture put on.
13. *Burma yowan-t'ho* before the yellow or green colour has been applied.
14. Ditto, completed with yellow.

By Major HENRY BURNEY.—(Continued.)

15. Dinner box made at Ava; first stage, shewing how the pieces of the woodwork are joined together.
16. Dinner box; second stage, with a coat of bran ashes priming, and ground smooth on the lathe.
17. Dinner box; last stage, covered with vermillion.
18. Basket-work frame of a betel-box
19. A Burmese bucket of coarse basket-work
20. Specimen of the *Myen wa* bamboo.
21. Specimen of the *Ton wa* ditto.
22. Specimen of the latter, cut for basket-work.
23. A small deal box, covered with fine priming, and a coat of the first kind of varnish; part of this box is gilt.
24. A packet containing specimens of the stones and red earth used in the manufacture, also a brush of cocoa-nut fibre.
25. A packet containing two gravers and a piece of slate.
26. A packet containing a piece of petrified wood, and some polishing powder.
27. A packet containing specimens of vermillion, Chinese cinnabar, and paints.
28. A packet containing Burmese gold leaf.
29. A block on which the basket-work of cups is wove, with a cup upon it.
30. A Burmese lathe, with a chuck fixed to it.
31. A chuck for ditto, shewing how the cup is fixed to the lathe.
32. A basket-cylinder for ditto, shewing how the cup is lodged in it.
33. A betel-box, of a red colour, imported from *Laos*.
34. A betel-box of a green colour, manufactured at *Ava*.
35. A betel-box of a yellow colour, manufactured at *Nyoungoo*.
36. A betel-box of a black colour, finished with the polishing powder manufactured at *Ava*.
37. A betel-box of a yellow colour, and of a superior description, manufactured at *Pugan*.
38. A small box for keeping tea.
39. Three bottles of the first kind of varnish.
40. Two bottles of the second ditto.
41. One ditto, third ditto.
42. One ditto of calcined bones, sifted fine.
43. One ditto of ashes of paddy husk, sifted fine.
44. One ditto, *Shán* oil.
45. A specimen of the *Powet-kyonng-yet* style of bamboo basket-work.*

* For an ample account of the method of manufacturing these articles, see a paper by Major BURNEY in the present volume of the Society's *Transactions*.

By Major HENRY BURNEY.—(Continued.)

Models of Burmese musical instruments :

1. The *tarau*, or violin and bow.
2. The *kyee wain*, a circle of gongs on the principle of the harmonica.
3. The *tshain*, a circle of kettle-drums on the same principle.
4. The *talain kyee wain*, a set of gongs on a curved frame.
5. The *mee-gyoung*, a kind of three-stringed guitar.
6. The *pattala*, another kind of guitar.
7. The *tsoung*, or Burmese harp.

By the Right Honourable SIR GORE OUSELEY, Bart., V.P.R.A.S., &c. *March 17, 1832.*

The following Articles, found about fifty-two years ago in a Nipālese Fort :

A small-bas relief figure of MAHÁDÉVA in terra-cotta, indicating an inclination in the religion of Nipāl to the *Yoni* Schism.

A small bas-relief figure of BUDD'HA in terra-cotta.

By F. A. BELL, Esq..... *May 5, 1832.*

Four pice ; Bengal copper money.

One Russian five-copeck piece of 1803 ; copper.

By — CHURCH, Esq. *May 19, 1832.*

A Siamese bowl or cup, of silver, richly inlaid with gold in foliage.

A Siamese *chunam*-box and lid of the same material.

By Mr. VAN DER PALM, of Sourabaya, Java. *May 18, 1832.*

A sculpture in bas-relief, representing a tree with a male figure on one side, and a female on the other, the whole surrounded by two snakes ; supposed to represent Adam and Eve in the garden of Eden.*

By CAPTAIN HENRY BEVAN, of the Madras Army..... *June 16, 1832.*

Two caps made of needle-work, worn by the *Mopitas*, or Muhammedans of Malabar.

Three specimens of ground rattan, from the jungles of Wynád, in Malabar.

By Lieutenant-Colonel HENRY JOHN BOWLER, M.R.A.S. *June 17, 1832.*

A specimen of chalcedony from Gouveryputnam, in the *Rájámandiri* district.

A large specimen of wood opal from Yendabú, on the river Irawadi, in Ava.

By the Right Honourable Sir EDWARD HYDE EAST, Bart., M.R.A.S. *July 7, 1832.*

A Ghórka *korah*, or crooked sword.

A Nipālese straight sabre.

By RICHARD CLARKE, Esq., M.R.A.S. *July 7, 1832.*

A painting in oil, by CHINNERY, of the *Bráhmāna* Bull (*Bos Indicus*, Linn.)

By J. H. ASTALL, Esq. *July 21, 1832.*

The apparatus used by the Chinese for smoking opium ; comprising a pipe covered, with tortoise-shell, having mouthpieces of porcelain ; a box with looking-glass, lamp, pans, and instruments for cutting the opium.

* Representations of a similar character are found on some coins in the collection of Wm. Marsden Esq. Vide his *Numismata Orientalia Illustrata*. 4to. London, 1825, Part II. and plate LV.

- By JOHN REEVES, Esq., M.R.A.S., A.L.S., &c. Dec. 1, 1832.
 Two tail feathers of th *Phasiaunus Reevesii*.
 A rosary of the *Buddhist* priests in China, made of the stones of the *Pimela Alba* (LOUR), or *Canarium Album* (Linn.), usually called the China olive, carved to represent the *Shih pá lo han*, or eighteen disciples of BUDD'HA.
 A Japanese box made of plaited bamboo, containing specimens of the edible birds'-nests used in China.
 Two bags of Japanese rice, sometimes called "pincushion" rice.
 Specimens of Chinese current coin, from A.D. 745 to 1830, with some of the very ancient pieces, and some of Cochin China; in all 102 pieces.
 A counting-board, used by the Chinese money changers.
 A box of ornamented China ink.
 Specimen of the tea made for the use of the Emperor of China, which appears to be the *Pekoe* of the *Hyson* plant.
 A MS. description of the more ancient coins of China; in Chinese.
 Specimen of the brick tea; specimens of various kinds of tea in bunches and balls; and four small canisters of tea sold in China at the rate of one dollar each, equal to 5 gs. per lb.
 Specimen of the plant from which the rice-paper is made (*Æschynomene Paludosa* ?)
 By Sir EDWARD THOMASON, Knt. Dec. 1, 1832.
 A section of an elephant's tusk, with an iron musket-ball lodged in it.
 By MRS. PERRING. Dec. 1, 1832.
 The model of a Point de Galle Canoe, fitted with outrigger and bamboo log.
 The model of the Palanquin and bearers of a Ceylonese *Múdeliar*.
 Models in wood, coloured after nature, of the following natives of Ceylon:—1, the late King of Kandy; 2, the Queen; 3, a *Múdeliar*; 4, a gentleman; 5, a lady; 6, a priest; 7 and 8, *Lascoryns* with fans; 9, a cultivator; 10, a market-woman; 11, a fisherman; 12, a cinnamon-peeler; 13, a blacksmith; 14, toddy-drawer; 15, barber; 16, a washerwoman; 17, a maker of *Jageri*; 18, a *Tomtom* beater; 19, a *Chunam* maker; 20, *Oleah* caste; 21, *Bodeah* caste; 22, a *Chittie* of Jaffnapatam; 23, a *Parawa* or cloth merchant; 24, a Moorman; 25, a toddy-drawer climbing a tree.
 A pouch made of the fibres of the *Ola* plant, containing Areca nut (*A. Catechu*), and Betel leaf (*Piper Betel*).
 Two polished sections of the Elephant's grinder.
 A specimen of Chinese grass-cloth.
 By Sir THOMAS PHILLIPS, Bart., F.R.S., M.R.A.S. Dec. 1, 1832.
 A Papyrus MS. in the enchorial character, mounted and framed.
 Nine small figures in baked earth representing an Egyptian deity with the crook and flail. Six of these figures have hieroglyphics over the whole of the front and back; the remaining three have bands of hieroglyphics down the centre of the front only.
 By Miss PERRING Dec. 1, 1832.
 A Persian purse, of purple velvet embroidered with gold.

- By H. J. DOMIS, Esq., F.M.R.A.S.Dec. 1, 1832.
 1. The model of a prow called *Paduwakan*, completely rigged.
 2. The model of a prow called *Sekong*, completely rigged, with a double outrigger and balance logs.
 3. An ancient Javanese musical instrument, called *Amkeong*.
 4. A Macassar *Kruidhoom*, or short sabre.
 5. Nine long bamboo arrows.
 6. A powder-flask, made of Buffalo's horn.
- By JOHN SCOTT, Esq. M.D., M.R.A.S.Dec. 15, 1832, &c.
 The skull and horns of a Buffalo, wanting the lower jaw, shot at the Cape of Good Hope.
 The skull of the Hippopotamus, wanting the front tusks.
 The stuffed skin of the Spring Bok, of the Cape of Good Hope.
- By MRS. DAVIDS.Jan. 5, 1833.
 Six impressions in wax, from Oriental seals.
 Three engraved seal stones, *viz.* one red agate, one white agate, and one bloodstone.
 One moss agate.
 A Turkish asper.
- By the Right Honourable HENRY ELLIS, M.R.A.S.Jan. 5, 1833.
 Two spears from the South Sea Islands, pointed with wood and barbed.
 Two spears from the South Sea Islands, pointed with bone.
 One club, with the handle roughly carved, and a star in ivory inlaid at each end.
 One ditto, plain.
 Three cane arrows, pointed with wood.
 Three ditto, painted and pointed with bone.
- By WILLIAM HOOPER, Esq.Jan. 19, 1833.
 Thirty-one specimens of birds from the neighbourhood of the *Nilagiri* hills in Coimbatore.
 Two bats, from ditto.
 Eight quadrupeds and three serpents, from ditto.
- By JAMES ATKINSON, Esq., of the Honourable East-India Company's Medical Service, on the Bengal Establishment.Feb. 2, 1833.
 An original portrait in oil, painted by himself, of the Right Honourable GEORGE, Earl of MUNSTER, one of the Vice-Presidents of the Royal Asiatic Society.
- By Major-General Sir HENRY WORSLEY, K.C.B., M.R.A.S.Feb. 2, 1833.
 A model of the *Chukkie*, or common hand-mill, used in grinding corn, &c., in India.
 A Népálese *Kúkeri* knife, in a handsome sheath of purple velvet.
- By Colonel JOHN STAPLES HARRIOT, M.R.A.S.Feb. 16, 1833.
 A figure of *Buddha* carved in stone, from the Island of Ceylon.
 The skull and beak of the bird called the "Adjutant," (*Arda Argala*) in Bengal.

By Colonel JOHN STAPLES HARRIOTT.—(Continued.)

Skeleton head of the Bear from *Medinipura*, in Bengal.

Skeleton head of the Leopard, from ditto.

Skeleton head of the Vulture, from ditto.

A Bengal sabre, called a *Kharg*.

Twelve pieces of *Hindú* sculpture, from the ruins of various temples in *Rájásthán*.

By JAMES STEWART FORBES, Esq., M.R.A.S. *March 16, 1833.*

The figure of a goddess carved in ivory, from the temple of Hangranketty, near Kandy in Ceylon.

By BROWNE ROBERTS, Esq., M.R.A.S. *April 20, 1833.*

A cloak made of the skin of the Cashmír Shawl Goat; formerly the property of RANAJÍT SINHA.

By JOHN FORBES ROYLE, Esq., M.R.A.S. *May 18, 1833.*

A pair of pistols manufactured in Cashmír, with damasked barrels.

A hatchet used by the hill people of Kemaon, Gerhwal, and Sirmor.

A dagger or stiletto used by thieves in the northern parts of India.

A human thigh-bone, used as a trumpet in Bhotan.

By JOHANNES WITZLEINS PEREIRA, Esq. *June 1, 1833.*

The model of a *Dágoba*, or temple containing a relic of BUDD'HA; carved in ivory.

The model of a *Carandu*, or relic-box, usually deposited in the *Dágobas*; carved in ivory, and painted.

By DON JUAN DE SILVA, C.M.R.A.S., *June 15, 1833.*

Specimens of the gems found in the District of Galle in Ceylon; *viz.*: 1, Tutto Kalta; 2, Pusparaaga; 3, Wayroddiya; 4, Gomaidagam; 5, Pornakkam; 6, Nilkaat; 7, Patcha toramully; 8, Soodoo toramully; 9, Pamy toramully; 10, Lorda Gomidigam; 11, Ambalest; 12, Kallepatingor; 13, Puddiyana; 14, Kanake toramully; 15, undescribed; 16, ditto.

By Mr. W. W. HEWSON, H.M. 78th Regt. *June, 15, 1833.*

A Japanese fan of coloured paper.

The saw of a young Saw-fish.

Two large shells with feelers.

One spinated ditto.

Forty other shells, various.

Two small silver coins, of *Alumgir*.

A silver fanam.

Copper coins struck by the Dutch East-India Company for circulation in Ceylon, *viz.*

1 Stiver, 1747; 1 half-stiver, 1753; 1 ditto, 1779; 1 stiver, 1785; 1 2-stiver-piece, 1788; 1 stiver, 1789; 1 ditto, 1792; 1 ditto, 1794; 1 ditto, 1795; and one not dated.

By Mr. W. H. HEWSON.—(Continued.)

A set of 1 stiver, 1 half-stiver, and 1¼th stiver struck in 1802, by the British Government.

A similar set for 1815; and two others struck on the island.

A Ceylonese dirk in a wooden sheath, mounted with ivory.

By THOMAS CHAMBRE, Esq., M.R.A.S. July 6, 1833.

Two figures of Hottentots, male and female, 11½ inches in height, with their equipments; made in leather by the natives of South Africa.

By RAMASWAMI MUDELIAR, *Jaghirdar* of *Sivasamudram*, Cor. M.R.A.S., (through the Right Hon. Stephen Rumbold Lushington) July 6, 1833.

A model in wood of the Lushington Granite Stone Bridge, erected by Rámaswámi Múdeliar over the river *Cáveri* at *Sivasamudram*.* Length of the model 187 inches. Scale, 10 feet to an inch.

By JAMES MITCHELL, Esq., Assistant Secretary, R.A.S. July 6, 1833.

A cast in sulphur from a medal struck by Sháh Jehán.

By his Excellency the Chevalier DON LOPEZ DE CORDOBA, C.M.R.A.S. July 20, 1833.

A Turkish rifle, with damasked barrel, richly inlaid and mounted with silver; the stock inlaid with ivory.

By MASTER SULLIVAN July 20, 1833.

A ball of hair taken from the stomach of a Cow in Van Dieman's Land; circumference of the ball 23½ inches.

By WILLIAM MARSDEN, Esq., F.R.S., M.R.A.S. July 20, 1833.

An impression in plaster from an ancient Hindú seal, of an oval shape; with figures of the *Brahmana* bull at the top.

By Mrs. HEBER. July 20, 1833.

Seven Hircarra spears.

Three Ceylonese punkáhs or fans, each made of part of a leaf of the *Talipat* palm (*Corypha Umbraculifera*).

Two Ceylonese bows.

A *Chabuk*, or whip, carried before the Adicars of Kandy, in processions.

A punkah made of *Cuscus* grass.

An Indian shield made of Buffalo's hide.

By the Chevalier de PARAVEY. July 20, 1833.

Some casts in plaster from Persepolitan antiquities.

* Vide *Transactions of the Royal Asiatic Society*, vol. III.

CORRECTIONS.

Page.	Line.		Page.	Line.	
32,	7	(and elsewhere), for <i>Musafarín</i> read <i>Musáfirín</i> .	74,	9,	for <i>Rahu</i> read <i>Ráhu</i> .
—	8,	for <i>Hujat</i> read <i>Hujjat</i> .	78,	12	(and elsewhere), for <i>Dwipa</i> read <i>Dwípa</i> .
—	9	(and elsewhere), for <i>Mualiját</i> read <i>Muálaját</i> .	—	16,	for <i>Sab,ha</i> read <i>Sab,há</i> .
—	14,	for Fazel read Fazl.	81,	36,	for DRUVA read D _{HRUVA} .
40,	2,	dele that.	84,	30,	for <i>Pipala</i> read <i>Pippala</i> .
50,		note, for ذاكړه read ذاكړه.	140,	6	(and elsewhere), for PÁNDÚS read <i>Pándus</i> .
53,		note *, for لتنزىل read لتنزىل ; and for المنذرين read المنذرين.	141,		note *, for <i>Yadú</i> read <i>Yadu</i> ; and for <i>Búdha</i> read <i>Budha</i> .
—		note ‡, for هفت حفت read هفت.	—		note §, for <i>Mathúra</i> read <i>Mathurá</i> .
54,	9,	for <i>Bebal</i> should perhaps be read <i>Bipal</i> .	—		note ||, for <i>Súrapúra</i> read <i>Súrapura</i> .
—	12,	for <i>tángahs</i> should perhaps be read <i>tánkas</i> .	246,	3,	for of read or.
—		note ||, for ماشك should perhaps be read ماشه.	256,	7,	for <i>Rama</i> read <i>Ráma</i> .
55,	3,	for <i>Koruh</i> should apparently be read <i>Karoh</i> or <i>Kuroh</i> .	284,	13,	for <i>Nírvan</i> read <i>Nikeban</i> .
59,		note †, for <i>Salmala</i> read <i>Sálmala</i> .	307,	32,	for <i>lapaswís</i> read <i>tapaswís</i> .
—	—	for <i>Sidhanta</i> read <i>Siddhánta</i> .	—	36,	for <i>Godávari</i> read <i>Godávarí</i> .
60,	32,	for <i>Dhurma</i> read <i>Dharma</i> .	348,	16,	for <i>Párkár</i> should perhaps be read <i>Párkar</i> .
61,	3	(and elsewhere), for BRÁHMA read BRAHMÁ.	352,	10,	for <i>Parkar</i> should perhaps be read <i>Párkar</i> .
—	4,	for MÁHA read MAHÁ.	361,	35,	for <i>Gnan</i> read <i>Gnán</i> .
62,		note †, for sate read sat.	363,	7,	} for <i>Gujeratí</i> read <i>Gujerátí</i> .
65,	15,	for <i>Vrindavan</i> read <i>Vrindávan</i> .	—	23,	
—	—	for NUND,HA read NANDA.	—	29,	for <i>máhmúdí</i> read <i>mahmúdí</i> .
—	16,	for <i>Geda</i> read <i>Gadá</i> .	375,	34,	for <i>Parsís</i> read <i>Pársís</i> .
67,	34	(and elsewhere), for <i>Sri</i> read <i>Srí</i> .	395,	11,	for <i>Khalifat</i> read <i>Khiláfat</i> .
71,	29	(and elsewhere), for <i>Chakkra</i> read <i>Chakra</i> .	463,	11,	} for <i>Rájavali</i> read <i>Rájáváli</i> .
72,	8,	for <i>Náraka</i> read <i>Naraka</i> .	471,	16,	
—	14,	for <i>Sud,hárasan</i> read <i>Sudarsan</i> .	483,	17,	for <i>dátús</i> perhaps <i>d,hátús</i> should be read.
			494,	10, 12,	for <i>Vijáya</i> perhaps <i>Vijaya</i> should be read.

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